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Pacific Fruit Express gets 1,000 **high-capacity** mechanical reefers . . p. 12

April 15, 1963

RAILWAY AGE WEEKLY

ACL-SAL Passenger Terminal: Symbol of Confidence

p. 14

How MP Retrains Clerks for New Era of Automation

p. 16

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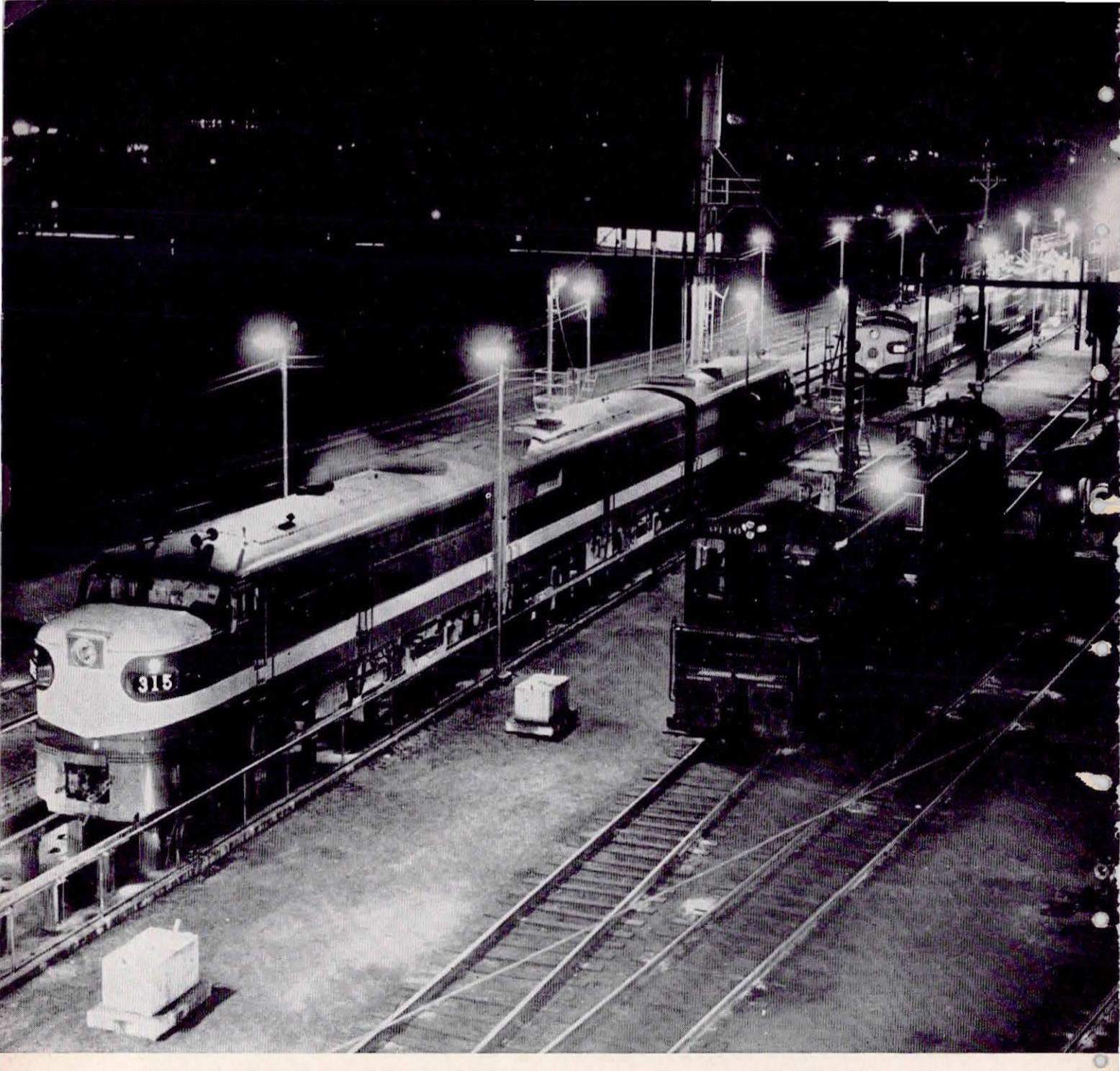

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RAILWAY AGE WEEK AT A GLANCE

April 15, 1963 • Vol. 154, No. 14

Railroads bound back with auto-rack

Efforts to recapture the lucrative auto-hauling business have been spectacularly successful. This year one out of every three new motor vehicles is moving by rail p.9

Transit vote due in House

A Senate-approved bill would provide a total of $750 million in transit-aid grants and loan guaranties. Meanwhile, the AAR has reiterated its support of the legislation p.10

PFE gets high-capacity reefers

Pacific Car & Foundry is delivering 1,000 of the mechanically refrigerated cars, which have 4,000-cubic-foot capacity, cushion underframes and load-retaining equipment p.12

Work rules: A grotesque minuet

Each step in the long-drawn-out featherbedding case has been charted by a 37-year-old Act of Congress that, unfortunately, contains no provision to stop the music p.13

New ACL-SAL station: Symbol of confidence

The new joint passenger station at Savannah, Ga., features ideas of architectural design and arrangement aimed at promoting the patrons' comfort and convenience p.14

How MP retrains clerks for automation

Hundreds of the road's employees are being educated in the modern skills needed to record car movements via IBM keypunch and tabulating equipment p.16

British Railways: Drastic medicine

Dr. Beeching's prescription for Britain's sickly rail system calls for a large dose of passenger-service abandonment and getting freight service back into shape p.31

American Railway Progress Exposition program

Here's the tentative schedule, plus a listing of pre-opening functions, of meetings and other events now planned for the October 9-16 Exposition in Chicago p.36

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RAILWAY AGE WEEK AT A GLANCE

AAR presses for arbitration law

A strong plea for compulsory arbitration—plus other changes in the Railway Labor Act—has been made by AAR President Loomis before a Congressional committee **p.37**

The Action Page–Lopsided promotion

Railroads and non-lunar scientific research have at least one thing in common—both are treated as stepchildren so far as governmental consideration is concerned **p.42**

Short and Significant

The piggyback boom . . .

shows no sign of leveling off. Loadings peaked to an all-time high of 16,449 cars in the week ended March 30. Loadings for the corresponding '62 week totaled 13,701 cars.

A $54-million high-speed transit line . . .

between Philadelphia and Camden and Kirkwood, N.J., has been approved by the Delaware River Port Authority. Construction of the facility will take about three years.

'E for Export' flag . . .

has been awarded to Alco for its "notable contribution to the industrialization and economic growth of five continents." Since 1947 Alco has built 1,800 locomotives for export.

Another red-ink year . . .

is forecast for Erie-Lackawanna. President M. G. McInnes predicts a '63 deficit of $13 million, compared with losses of $16.6 million in 1962 and $26.5 million in 1961.

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Current Statistics

Operating revenues	
12 mos., 1962	$9,439,894,771
12 mos., 1961	9,187,122,899
Operating expenses	
12 mos, 1962	7,418,555,063
12 mos., 1961	7,271,159,800
Taxes	
12 mos., 1962	905,083,609
12 mos., 1961	991,555,905
Net railway operating income	
12 mos., 1962	725,645,679
12 mos., 1961	537,694,880
Net income estimated	
12 mos., 1962	574,000,000
12 mos, 1961	384,000,000

Carloadings revenue freight	
13 wks., 1963	6,600,442
13 wks., 1962	6,902,063
Freight cars on order	
March 1, 1963	19,952
March 1, 1962	17,736
Freight cars delivered	
2 mos., 1963	5,519
2 mos., 1962	4,818
Serviceable cars	
March 1, 1963	1,416,368
March 1, 1962	1,459,356
Cars awaiting repairs	
March 1, 1963	128,286
March 1, 1962	140,470

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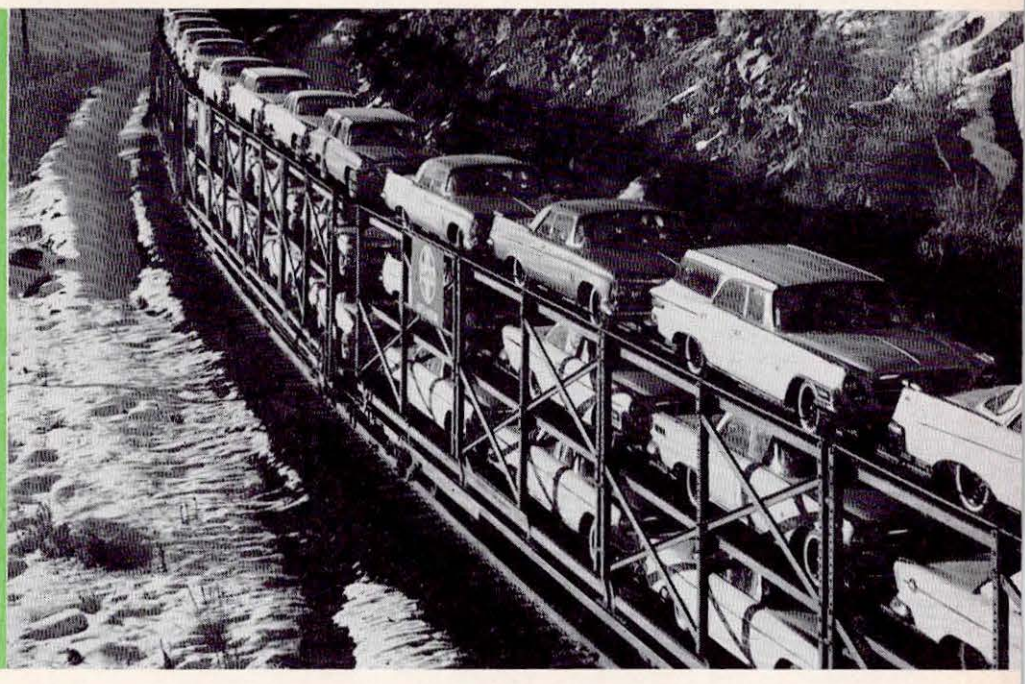
RRs Bound Back With Auto-Rack

Technology and incentive rates are keys to the railroad comeback in shipment of new autos.



One out of every four new automobiles produced in 1962 moved from assembly plant to distribution point by rail. In '63, the figure will be more like one out of every three—and the railroads have the potential to keep the traffic growing, to a point where they regain the supremacy in new-car hauling which they lost in the mid-1930s.

The traffic itself and the new revenues are much needed. But, equally important, the success of the auto-racks (like piggyback) has been a tremendous morale-builder for a hard-pressed industry. Chesapeake & Ohio puts it simply: "More significant than the money they [TOFC and racks] brought in . . . is the competitive fact which the piggyback and rack cars emphasize: It is possible for the railroads to win back traffic which they once had and then lost to other modes of transportation."

● **Traffic trend reversed.** Comments from a score of other roads add a loud "Amen" to C&O's buoyant declaration. The new railroad combination—a growing fleet of multi-level rack cars, fast service, competitive rates and an excellent record of no-damage deliveries—has completely reversed what was, from 1934 to 1960, a decaying traffic situation.

Last year was the auto industry's best since 1955. But the '63 model year promises to be even better—and that should mean continuing gains for the railroads, in terms of total cars handled and percentage of total auto traffic.

● **Nowhere but up.** Based on railroad experience generally in '62, new-car volume and revenues can't go anywhere but up.

Santa Fe talks of "continued rapid growth" of auto traffic last year. Canadian Pacific moved a "significantly larger volume" of cars and trucks. Missouri Pacific's multi-level auto traffic "more than doubled." So did Norfolk & Western's. Milwaukee's traffic in new cars "increased sharply"—by 147.6% from '61 levels. New York Central hauled about 525,000 autos, an increase of 57% from the year before. Wabash's loadings of autos (and parts) jumped 75%. Revenues from movement of cars and parts "showed the largest increase of all commodities handled" on Union Pacific. Illinois Central reported "our greatest gains" in cars, trucks, parts (and grain). Pennsylvania's auto-racks brought in revenue of close to $5 million. Frisco auto-hauling revenues jumped from less than $4 million to more than $5.5 million. Great Northern's auto-rack traffic was up 53%, Louisville & Nashville's up 51%.

● **Spectacular gains.** For the industry as a whole, gains have been almost as spectacular. The railroad share of shipments of motor vehicles went from 9.7% in 1960 (about 763,319 units) to 20.5% in '61 (more than 1,368,000 units) to 25.2% last year (an estimated 2,038,000 units). And the forecast: Booming auto production, plus the almost universal acceptance of rack-car service by the manufacturers, plus continued railroad investment in equipment and research on rates, will keep the percentages climbing.

● **From 70% to 8%.** In the 1920s, when trucks were primitive and good roads the exception, railroads consistently hauled more than 70% of the traffic. They slipped to less than 50% during the depression, hung on with 40% right after World War II—and then went into a slide that dropped their share of new-car traffic to 8% in 1959.

A year earlier, however, railroads and auto manufacturers—Santa Fe, Frisco, Ford and Chrysler, principally—had begun work on the idea, auto-TOFC, that turned into the rack-car revolution. By early '59, Frisco and Southern Pacific were running piggyback tests. In January 1960, both Frisco and Santa Fe had tri-level rack cars in test operation.

● **Race is on.** And by early summer of '60 the race was on, as Pullman-Standard built a fleet of fixed-deck cars for Frisco and a half-dozen manufacturers—led by Whitehead & Kales, Dana Corp., Paragon Bridge & Steel, ACF and Darby Corp.—tooled up for production of the removable bi- and tri-level racks that quickly took over the autos-on-rails traffic. By January 1961, more than 1,280 rack cars were in service, and the total grew rapidly—to 4,800 in January 1962 and to 6,250 in January '63.

WATCHING WASHINGTON WITH WALTER TAFT

TAFT

● **THERE IS VIGOROUS OPPOSITION** to the ICC's proposal that Congress amend Interstate Commerce Act provisions relating to carrier acquisitions of forwarders and forwarder acquisitions of carriers. The opposition comes from truckers, water carriers, shippers and the Railway Labor Executives' Association. Meanwhile, the Freight Forwarders Institute is a vigorous supporter of bills which have been introduced in the Senate and House to implement the Commission's proposal. The AAR has taken no position. As the Commission describes it generally, the proposal, one of 16 legislative recommendations in its latest annual report, is designed to clarify the forwarder-acquisition provisions which are "in some instances confusing, and apparently conflicting." The proposed clarification would transfer those provisions from the Act's Part IV to Part I's Section 5, which contains acquisition-of-control provisions applicable to other carriers subject to the Act.

THAT SHIFT, however, would have the effect of authorizing a forwarder, with Commission approval, to acquire a carrier. Part IV now prohibits that, but with an exception protecting rights of carriers to acquire other carriers under provisions of Part I's Section 5. Part IV, however, does permit a carrier, or person controlling a carrier, to acquire a forwarder.

THESE PROVISIONS, taken together, lead to "confusing" results, the Commission says. It gives this example: "A person who initially gains control of a common carrier can subsequently acquire control of a freight forwarder, but a person cannot first acquire control of a freight forwarder and then acquire control of a common carrier, although the result is the same in each instance. Also, a person who acquires control of a common carrier and freight forwarder, in that order, cannot later acquire direct control of another common carrier, although he may indirectly accomplish this by having the controlled common carrier acquire direct control of another common carrier."

THE OPPONENTS take the position that any confusing provisions can be eliminated without opening the door to direct ownership of carriers by forwarders. American Trucking Associations would prefer a complete prohibition of forwarder-carrier relationships, including divestiture of existing relationships. American Waterways Operators is not appeased by action of a House Interstate Commerce Subcommittee which amended the House bill to apply the Panama-Canal-Act requirements to acquisition of a water carrier by a forwarder owned or controlled by a railroad.

THE PANAMA-CANAL-ACT PROVISIONS are now in Section 5(16) of the Interstate Commerce Act. They prohibit railroad control of water carriers operating through the canal, but permit it elsewhere on the basis of special showings which are not required of nonrailroad applicants.

THE SHIPPPER OPPOSITION is being expressed by the National Industrial Traffic League. "Equitable competition between carriers and between agencies, and maintenance of reasonable rate levels, demand the continued separation, as it now exists, of freight forwarding and underlying carrier service," the League says. RLEA's position is consistent with its opposition to the railroad industry's diversification proposal, i.e., the call for more freedom to operate other agencies of transport.

Transit Vote Due In House

Fate of the Senate-approved legislation is uncertain, but proponents remain optimistic.

The Kennedy Administration and other proponents of federal aid for urban mass transportation are now working on the House side, having got favorable Senate action on a bill which contemplates a $750-million grant and loan-guaranty program.

The Senate bill, S.6, was passed by a 52-to-41 vote. The House bill, H.R. 3881, has been reported favorably from the Committee on Banking and Currency and awaits clearance by the Rules Committee. There are few flat predictions of what the House will do. Informed persons are more inclined to hedge by saying the vote will be "close," although some say they expect the House to pass "some form" of an urban transit bill. There was similar hedging about prospects for the Senate bill before it came to a vote and got through with its nine-vote margin.

Under both bills, the aid program would continue to be administered by the Housing and Home Finance Agency, which has been administering the short-range transit program provided for in the 1961 Housing Act. The Senate-approved bill provides for federal guaranty of loans totaling $375 million and federal grants in the same amount for a grand total of $750 million.

● **Aid for private operators.** The assistance would be available to states and local public bodies and agencies thereof. Their use of it could include assistance to private operators of mass transportation service, but only if they gave such companies "every feasible relief compatible with their own fiscal responsibilities," including, but "not necessarily limited to," relinquishment of taxes.

The federal assistance could be used "in financing the acquisition, construction, reconstruction and improvement of facilities and equipment for use, by operation or lease or otherwise, in mass transportation service in urban areas

and in coordinating such service with highway and other transportation in such areas." Eligible facilities and equipment would include "land (but no public highways), buses and other rolling stock, and any other real or personal property needed for an efficient and coordinated mass transportation system." There would be restrictions on the use of the federal aid to acquire a private transit company or its facilities, but it could be done if the private company were bankrupt, or if its facilities or services were supplementary to those of a publicly-owned system.

● **Two financing plans.** Under the bond-guaranty program, the administrator of HHFA would be authorized to guarantee the payment of so much of the interest and repayment of so much of the principal on revenue bonds of a state, local body, or agency thereof, as would, but for such guaranty, be unpaid when due. To be eligible for the guaranty the state and local body would have to waive "the normal status of its bonds as exempt from the provisions of the federal income tax laws, and the interest on any bond expressing such waiver shall not be exempt from taxation under the federal income tax laws."

How to qualify for grants

Under the grant program, the HHFA administrator would determine what portion of the cost of a project to be assisted could not be "reasonably" financed from revenues. That portion would be called the "net project cost." The federal grant for the project involved could be as much as two-thirds of this net project cost. The remainder, as the bill puts it, "shall be provided in cash" from sources other than federal funds, and no refund or reduction of that proportion shall be made at any time unless there is at the same time a refund of the proportional amount of the federal grant."

In determining the net project cost, there could be no allocation of estimated revenues as a reserve for replacement of equipment or facilities. Moreover, no grant could be made unless there was a commitment from non-federal sources to supply the remainder of a project's cost, and unless the federal government's interests were "adequately protected in the event of a default or a failure to complete such project."

● **Emergency grants.** The Senate bill would also provide for an emergency program of federal assistance where an urban-transit plan is "under active preparation although not yet completed," and there is "urgent need" to provide facilities and equipment or preserve existing facilities and equipment. The federal grant in such a situation could not exceed one-half of the net project cost, but there is also a provision for stepping-up the grant to the two-thirds basis if that basis' planning requirements are met within three years.

● **Labor protection.** Much of the Senate debate was discussion of the bill's labor-protection provisions. The result was inclusion of liberal provisions which might be difficult to get through the House.

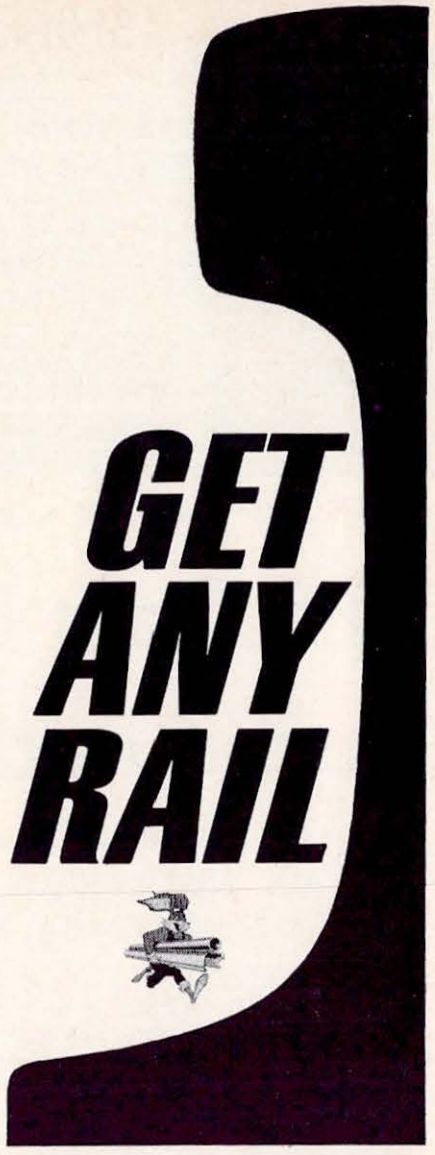
They stipulate that the granting of any assistance under the bill must be conditioned on inclusion in the assistance plan of "fair and equitable" labor-protection provisions, as determined by the HHFA administrator and the secretary of labor. The bill follows through from this general mandate to spell out the required arrangements as follows:

"Such protective arrangements shall include, without being limited to, such provisions as may be necessary for (1) the preservation of rights, privileges, and benefits (including the continuation of pension rights and benefits of all beneficiaries) under existing collective bargaining agreements or otherwise; (2) the continuation of collective bargaining in any situation where it now exists; (3) the protection of individual employees against a worsening of their positions with respect to their employment which shall in no event provide benefits less than those established pursuant to Section 5(2) (f) of the Interstate Commerce Act; (4) assurances of employment to employees of acquired mass transportation systems by the acquiring or operating entities, and priority of employment or reemployment of employees terminated or laid off; and (5) paid training or retraining programs."

● **AAR backs program.** While not all railroads are interested, the railroad industry supports the aid program. Gregory S. Prince, executive vice president and general counsel of the AAR, so advised Congressional committees which cleared the bills. As Mr. Prince noted, the bills would implement one of the recommendations of President Kennedy's Transportation Message.

"The urban mass transportation problem," Mr. Prince also said, "is not a problem with which all members of the railroad industry are confronted. However, in an industry as closely knit and physically integrated as the railroad industry, as indeed it must be in the performance of its public service, the detrimental effects of the urban mass transportation problem tend to spill over in some measure to the railroad industry generally."

The aid program "would not grant subsidies to railroad companies," Mr. Prince pointed out. He added that "it would afford to the public a measure of financial assistance in obtaining the transportation needed by that public."



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50-FOOT LOADING SPACE in 70-ton R-70-13 cars increases cubic capacity by more than 25 per cent.

PFE Gets Large Cushioned Reefers

Pacific Car & Foundry is delivering 1,000 mechanical refrigerator cars with 4,000-cubic-foot capacity, cushion underframes and load-retaining equipment for two-way service.

Higher capacity is being built into mechanical refrigerator cars. The 1,000 R-70-13 70-ton cars now being delivered to Pacific Fruit Express have 4,000 cubic-foot capacity—an increase of 25% compared with earlier R-70-12 cars (RA, July 11, 1960, p. 22).

Along with higher capacity, the new cars, now being turned out at a 10-car-a-day rate by Pacific Car & Foundry's Renton, Wash., shops have cushion underframes and load retaining equipment. They are expected to prove particularly attractive to shippers of eastbound perishables and frozen foods, and for return loads of general freight.

The R-70-13 car—56 feet 8⅝ inches over end sills—is 4½ feet longer than the R-70-12 design built at PFE's Los Angeles shop. It has a 50-foot lading space, 5 feet 2 inches longer; an inside width of 9 feet, or 4 inches more, and an inside loading height of 8 feet 10-11/16 inches, or 8-11/16 inches more than the R-70-12. Both cars are nominal 70-ton capacity, but the larger R-70-13 has a light weight of 85,500 pounds or 800 pounds less than the smaller R-70-12.

● **General construction.** The cars are a built-up welded design and have Hydra-Cushion underframes with 20-inch travel. All cars have 70-ton trucks, equipped with 6-inch by 11-inch axles, roller bearings and two-wear steel wheels.

Insulation in walls, floor and roof is 5 inches thick. Floors have polyurethane insulation, sides and roofs a combination of fiberglas and foil and side doors have corrugated plastic liners insulated with foam. Fifty cars will have polyurethane foam insulation.

The interior has aluminum ceiling sheets and ⅜ in. sidewall plywood lining. Floor racks with aluminum stringers are designed to support fork-lift trucks. All cars are equipped with movable load dividers to sectionalize the car-loading compartment into desired sections of any dimensions.

● **Refrigeration equipment.** The refrigeration equipment, designed to hold temperatures from —10 to 70 degrees F., has thermostatic controls operating on the temperature-sensing mercury-bulb principle. Power units are equipped with two-speed actuating devices which allow the diesel engine to operate at two speeds corresponding to 60 cycles, 220 volts and 40 cycles, 150 volts. Batteries are 12-volt nickel cadmium type, taking power for recharging from the alternator through a static-type rectifier charger.

Principal Weights and Dimensions of New PFE Cars

Length over pulling face of coupler	63 ft. 7-3/8 in.
Length over end sills	56 ft. 8-5/8 in.
Width over sheathing	10 ft. 0 in.
Width over side posts	10 ft. 3-3/4 in.
Extreme width	10 ft. 5-1/4 in.
Height, top of rail to top of running board	15 ft. 1 in.
Height, rail to top of floor racks	4 ft. 4-1/2 in.
Inside length, between load divider gates	50 ft. 0 in.
Inside width	9 ft. 0 in.
Inside height, floor rack to ceiling	9 ft. 2-13/16 in.
Available clear loading height	8 ft. 10-11/16 in.
Cubic loading capacity	4,000 cu. ft.
Width of side door opening	8 ft. 0 in.
Truck wheelbase	5 ft. 8 in.
Total wheelbase	51 ft. 4-5/8 in.
Light weight of car	85,000 lb.
Load limit	134,500 lb.
Fuel tank capacity	500 gal.

Work Rules – A Grotesque Minuet

There will be a settlement of the work-rules dispute, mainly because neither the brotherhoods nor the carriers nor the Administration nor the country can afford the alternatives.

Already, some observers are looking beyond settlement to the long-range effects that this battle —now more than four years old —will have, not only on future management-labor relations on the railroads but also on the whole process of bargaining in industry.

● **Prompt disposition?** One of the main points being made is that the rules case, more than any other recent dispute, showed up the Railway Labor Act as anything but "an Act to provide for the prompt disposition of disputes between carriers and their employees."

Top men in management are concerned because the RLA failed to offer the machinery for an orderly, reasonably swift settlement. They're also concerned because, as the dispute has dragged along, bitterness developed on both sides that could take a long time to wear off.

Union leaders, by virtue of the semi-political organization of unions, have also been caught in a squeeze—reluctant to give ground anywhere along the line.

The result has been that the work-rules case—like most major rail labor disputes, but to a greater extent—has turned into a grotesque minuet, with each step charted in a 37-year old Act of Congress. The main trouble, as some see it, has been that the Act contains no provision to stop the music.

● **No satisfaction.** Rail management, with demands it regards as vital for survival, has been denied any measure of satisfaction for 50 months. Rail labor leaders, some with restless, hard-to-handle constituents, haven't budged—apparently in a determination to hold the line unless and until they're sandbagged by powerful outside influences.

And while the rules dispute has twisted along its uncertain course, union demands—wages, rules, working conditions, fringe benefits—have been piling up at a rate which assures that agreement on the rules case will immediately plunge carriers and unions into new negotiations.

● **An imperfect document.** Both management and the brotherhoods profess belief in free collective bargaining. But both agree that the RLA has been an imperfect document for promoting bargaining. Mediation provisions of the Act seldom produce settlements, at least in the initial stages when mediation is first attempted. Arbitration provisions have been used rarely, because both sides must agree to arbitrate. Emergency-board procedures are now almost standard in major disputes—and, so far as management is concerned, those procedures no longer work effectively. Public opinion, framers of the Act said hopefully, will make board recommendations virtually binding on both parties. Public opinion, management now knows, hasn't wielded that much power.

Management at least has a plan for putting rail labor law on a more even keel: compulsory arbitration. The brotherhoods are bitterly opposed—but they haven't come up with an alternative proposal, aside from repeated references to "true collective bargaining." (Last word from the operating crafts on the rules dispute charged the Administration with failing to exert effort to bring the parties together and warned that "the Administration's errors of commission and omission will be remembered" if bargaining fails and "if legislation is then enacted to deprive American labor of its liberty.")

● **Arbitration coming?** Despite union opposition, however, arbitration machinery may be provided —because of the growing complexity of management-labor relations, the increasing emphasis on job-security and employee protection and the failure of RLA procedures to cope with new situations. Ironically, unions themselves may have helped prove the practicability of tri-partite arbitration, in job-security disputes between the Telegraphers and Chicago & North Western and between the Clerks and SP.

The recent longshoremen's strike touched off current demands for compulsory arbitration in the maritime industry—and a rail strike of major proportions (or even the threat of one) could swing legislative support to management's pro-arbitration position. The unions know this. They want to avoid being trapped—but, from all indications, they haven't figured how to do it.

Consideration of arbitration legislation, however, could be just one of a number of far-reaching effects of the rules dispute. Among the possibilities:

● A new look at the whole matter of imbalance in bargaining strength generally—because, as one railroad president noted recently, "Successful collective bargaining is stifled when there is monopoly on one side of the table and varying interests of competitive private enterprise on the other side."

● An increased recognition of the "public interest" in labor disputes and a more emphatic role for third parties.

● Emphasis on continuing talks between management and labor in an attempt to stabilize relations through a planned approach to mutual problems.

● A movement away from industry-wide bargaining and toward greater local-level participation in negotiations.

● Far greater stress on "progress plus protection"—the principle that management must be permitted to take full advantage of technological progress but that displaced employees should be protected through allowances, retraining benefits and preference for new job opportunities.

● A new look at consolidation among rail unions, because two dozen separate and distinct brotherhoods may be too many for efficient and economical operation.

● Greater efforts on both sides to brush away the clouds of doubt, distrust and bitterness which the rules dispute has created—in recognition of the fact that the interests of management and the unions are parallel far more often than not.

—Gus Welty

WAITING-ROOM design and appointments cater to the comfort and well-being of the railroads' patrons.

New SAL-ACL Station: Symbol of Confidence

The two roads' new joint passenger terminal at Savannah, Ga., features modern ideas of architectural design and arrangement —all aimed at promoting the comfort and convenience of patrons.

The new joint passenger station of the Seaboard Air Line and the Atlantic Coast Line at Savannah, Ga., is much more than merely a place that serves the needs of people getting on or off passenger trains. It is a symbol of the confidence which these roads are placing in the future of the railroad passenger business.

Reflecting the degree of this confidence, the station is designed with bold, modern lines and incorporates the latest developments in layout, design, materials, appurtenances and decorations.

● **SAL-ACL pledges.** In a joint statement to citizens of the community during the dedication ceremonies, officers of the two roads pledged that "we and our thousands of employees will continue our over-all efforts to provide the people of this area the finest in swift, safe dependable transportation."

Passenger business of the SAL and the ACL at Savannah was formerly handled through the Savannah Union Station which was owned equally by the two roads and the Southern. About five years ago, Southern discontinued passenger service at Savannah but retained its interest in the station.

For a number of years, the city had been agitating for a new and more modern railroad station. The decision to undertake such a project was precipitated by plans for extensive highway construction within the city—plans calling for construction of two interstate routes, one extending north and south and the other east and west. As projected, these routes, particularly the east-and-west highway, would interfere with some of the lines and yards of the SAL and ACL, and the Union Station.

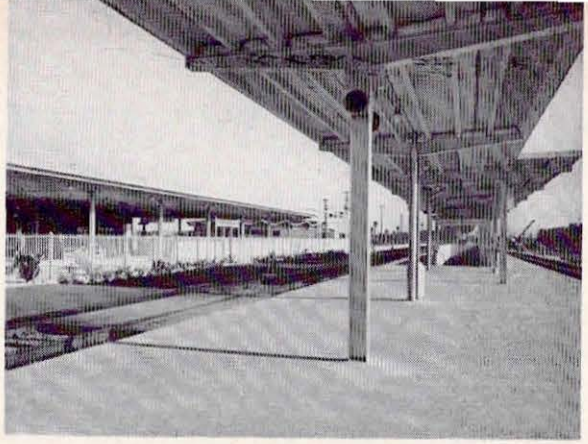
● **Merger a factor.** In view of the proposed merger of the SAL and ACL, the roads had already given consideration to building a joint station at Savannah. Hence, when it became apparent that the highway construction program would require abandonment of Union Station, it was decided to proceed with construction of a joint station several miles west of the old facility. Accordingly, part of the property on which the Union Station was located was sold to the Chatham County commissioners who, in turn, deeded it to the state for use as a right-of-way for the highway.

The new station is built on property formerly owned by ACL. A 50% interest in the site was bought by SAL; then the property was sold to the Savannah District Authority, which owns the new station. The two railroads lease the facility from the District Authority, a political subdivision of the state of Georgia.

Funds to defray the cost of the land and buildings, amounting to $1.2 million, were obtained from the proceeds of bonds issued by the District Authority. The total cost of the project—including money spent by the railroads for signals, communications and new tracks—amounted to $1.7 million.

● **Joint design work.** Design work on the station facilities was performed jointly by SAL and ACL. Coast Line designed the track and signal facilities and performed the work with its forces. Seaboard designed the station layout and awarded the construction contracts. All work was performed under the general direction of L. E. Bates, ACL chief engineer, and T. B. Hutcheson, chief engineer of SAL.

The new station, located in a less congested area than the old Union Station, is readily accessible to cabs and automobiles (and will be even more so when the new highway routes go into service). For its part, the county placed directional signs on the route to the station, made improvements to drainage systems and highway approaches, and installed street lights. The city assisted in the construction of



PLATFORM CANOPY (left) is 1,000 feet long. Roof members of the canopy and station are prestressed concrete double-T slabs. The station (below) is served by paved parking areas with spaces for more than 200 vehicles.

water mains to the new site.

The old station was located several miles off the main tracks, requiring back-up and wye-track train movements. The new station is located on the east side of a double-track main line. It is served by two through tracks and two stub-end service tracks which enter the station layout from opposite directions. Through tracks are located on opposite sides of a concrete passenger platform and are of sufficient length to accommodate 26-car trains. The platform is protected by a canopy 1,000 feet long.

When only one train is in the station, passengers move from the station to the train through gates at floor level. When two trains occupy the station tracks at the same time, passengers can move to and from trains through a pedestrian subway connected by ramps to the platform levels.

● **Parking for 200 cars.** A single-story, air-conditioned structure 161 feet by 88 feet, the station building is almost entirely surrounded by a roof overhang or canopy of varying width, which covers the concourse on the track side, a porte-cochere on the street side and a portico at the south end of the building. The station is bordered by about 17,000 square yards of paved driveways and parking areas—the latter having spaces for more than 200 automobiles. A paging system permits train announcements originating in the offices to be heard throughout the building, station platforms and parking areas.

● **Modern design.** The station building is of modern architectural design, both as to structural features and as to appearance. One major objective: to obtain a structure that would be as nearly maintenance-free as possible. Foundations are concrete on creosoted timber piling. Exterior walls are concrete blocks faced with pink Cherokee brick from Macon, Ga., and Indiana limestone.

Structural members of the station and shed roofs consist of steel columns, girders and beams supporting prestressed concrete double-T slabs. Floors are terrazzo in the waiting room and auxiliary facilities and resilient tile in the ticket office and related rooms. Waiting-room and office walls are plastered, with some sections covered with vinyl wall covering. Ceilings are of acoustical plaster.

● **Murals in waiting room.** In designing the station, special attention was given to the appearance and appointments in the waiting room which, including the lobby, is 46.5 feet by 68 feet in plan. Easy chairs, sofas and love seats, all made of wrought iron frames with foam rubber cushions, are placed centrally in the room and elsewhere in informal groupings.

Coffee tables and planter tables, all with wrought iron frames and laminated plastic tops, add to the atmosphere. Flush fluorescent lighting fixtures in the ceiling are supplemented by suspended lights over the central grouping of easy chairs. Murals on opposite walls of the waiting room depict early phases of Savannah history.

The ticket office, with open-type counter, is located on one side of the lobby at the north end of the waiting room, where it is convenient to two of the three main entrances, one on the street side and the other on the track side. The ticket office is flanked on one side by the agent's office and on the other by the baggage counter.

● **Other facilities included.** Additional facilities in the station, all placed in the north portion of the building, include an office for the passenger representative and stationmaster, crews' order room, telegraph office, baggage storage room, a room for communication and signal equipment, another for air-conditioning equipment, facilities for red caps and a room for handling U.S. mail.

Building air-conditioned

Air-conditioning equipment consists of a 25-ton water-chiller unit. A fan unit with chilled water coil and steam coil sends air of the proper temperature to the various rooms for year-around comfort. The system uses an electrostatic air filter and is controlled by pneumatic devices.

A utility or service building north of the passenger station houses trainmen's welfare facilities, a steam power plant, locomotive water-treating facilities and mechanical storerooms. Two 50-hp steam boilers furnish steam at 125-pound pressure to heat the station building, the utility building and as many as 12 layover passenger cars.

Water for the steam generators of diesel locomotives and the locomotive cooling systems is treated in the utility building and pumped into a 60,000-gallon storage tank. From here the water is piped to four locomotive stop positions on the platforms. At regular intervals along each of the through tracks, 58 hydrants are provided for delivery of drinking water from the city system to the tanks on passenger and dining cars.

How the MP Retrains Clerks for Automation

Here's a description of the economical and voluntary method by which the MP retrains its employees in the new skills needed for a systems automation program that was begun last July.

Charles A. Thomas (above) is supervisor of MP program. Dupo, Ill., group (right), watches special film as it is discussed by training team of Wallace Johnson (standing) and R. E. Smith (seated nearest screen).

By CHARLES A. THOMAS*

When the technology changes, can railroad employees change with it? When automation arrives, must it displace present workers, or can they effectively be retrained in new skills?

Virtually every segment of American industry today faces these questions to some degree, and the need to answer them is becoming more pressing.

Railroading is no exception. However, at the Missouri Pacific, there is no question about the answer. It is retraining—which we have found to be feasible, effective and economical in a systems automation program begun last July.

More than 150 clerks in three yard offices, whose job is to record car movements, have been successfully re-educated to do it via IBM keypunch and tabulating equipment. Thirty "inside clerks" who were using teleprinters under our old system are putting their new skills to work immediately. The rest—"outside clerks," who locate the cars physically—were looking to the future and possible "bidding" on better jobs when they took part in the voluntary program.

Before it is completed, several hundred more men and women will have participated as additional yards are cut over to punched-card recording of car movements.

Most of these people knew absolutely nothing about IBM equipment. Yet, within four months after the first course, at our Dupo, Ill., yards, one woman yard clerk was punching 175 80-column cards per hour. And, most of those who took part have exceeded the rate of 125 80-column cards per hour we established as a minimum.

So far, we have not had to "wash out" anyone in the training program, although a few employees have realized their abilities do not lie in this direction and have voluntarily dropped from the program.

We all recognize that railroading is on the threshold of many changes. But retraining like this is required if we are to take full advantage of them.

It is the obvious best approach to the problem of staffing to meet new needs. When you have a man who has worked for you for one, five, or ten years, you have an investment in him. It behooves you to give him new skills.

Our industry has a tradition of doing this—as we went from steam to diesel, for example. Within reason, anyone who is properly motivated can learn new skills.

Pre-course indoctrination by supervisors is important. So is the use of the right teaching tools. Our course is built around a series of ten keypunch training films and a variable speed projector produced by Perceptual Development Laboratories, St. Louis.

These are used in conjunction with the actual keypunch machines, plus flip charts and an instruction book we developed.

With this combination, retraining at Missouri Pacific is proving to be both successful and economical. Our costs will range from $25 to $50 per person, depending on how many eventually take the course.

Missouri Pacific, Texas & Pacific, and our subsidiaries, rank third nationally in track mileage, with 11,000 miles in the 12 states in which the system operates. The system lines' gross revenue in 1962 totalled about $390 million.

In the past, freight car movement through the two lines' yards has been recorded and compiled into wheel reports via teleprinters. The major shortcoming of this has been the lack of any provision for automatic preparation of the many detailed reports which must be developed from this basic information.

In addition, it has not provided the discipline of format so necessary for efficient input into our computer system in the St. Louis headquarters offices.

Now, in the Dupo, Ill., Little Rock, Ark., and Kansas City, Mo., yards which have been cut over, car movement information is key-punched into IBM cards. These are fed through tabulators to print the wheel reports. Then the cards are converted to five-channel paper tape and the data transmitted via teletype to the next terminal and to St. Louis. There, the paper tape is converted to cards and the cards to magnetic tape for computer input.

This new system already provides many byproduct benefits both in the yard office and the general office. The "jumbo report" of all cars into and out of any terminal, for example, formerly had to be prepared manually. Now, the cards are simply sorted into the proper sequence and run. Interchange reports are also prepared mechanically.

Eventually, each time we move a car, we will get a card. Machine and computer processing of these will result in:

- More effective car utilization.
- More effective control of overhead traffic.
- Production of complex interchange reports as a byproduct.
- Advance yard information.
- Automatic capturing of the basic requirements for most statistics and passing reports.
- Automatic compilation of all requirements for the traffic department.
- Ease of compilation of estimated earnings.
- Eventual establishment of a perpetual car inventory.
- Machine preparation of the jumbo book.

*Mr. Thomas is a systems analyst in the Methods and Procedures Department of the Missouri Pacific at St. Louis, Mo.

Some of these applications, of course, are well in the future. But, because so many of them will be derived from the basic information captured in the yard offices, the cooperation of the employees there and their effective retraining have been essential. In addition, we are fortunate to have top management approval of this program.

Proper psychological preparation for the changeover is vital, of course. A week before the first training sessions at Dupo, we brought some supervisory personnel and yard clerks into our St. Louis offices for three days of indoctrination. They visited the computer installation and received a very thorough explanation of the meaning and purposes of the new system.

We first presented this from the railroad's point of view, discussing the reasons for automating source data, the economic need, etc. Then, an industrial psychologist discussed the change from the point of view of the individual employees who would be affected. Supervisors were urged to:

- Make sure employees understood every detail and purpose of the changes.
- Encourage employees to accept more responsibility.
- Improve the over-all operation by inviting employees' suggestions and allowing them to know the results of these suggestions.
- Help employees develop an open-minded attitude toward change generally.
- Help them to develop the individual enterprise which results in greater productivity, higher standards of living and an increase in human dignity.

Once the supervisors were personally convinced, they did an excellent job of selling the changeover to the employees.

The three-week training sessions are held at a yard office just before it is to be cut over. Classes are set up in two shifts so that workers on any of three operating shifts will have an opportunity to attend on their off-hours, on a voluntary basis. Classes average 20 to 25 persons.

Films during first week

The first week is devoted almost exclusively to the Perceptual Development Labs' keypunch training films. These are drill films, shown at increasing speed on the firm's PerceptoScope projector. The trainees actually punch cards while watching them.

The second week is devoted to practice card punching from actual waybills. We use a series of flip charts showing the relationship of the cards and the bills. Flow charts indicate the similarities and differences between the teleprinter system and new punched card system. They also graphically reveal the shortcomings of the former.

Typically, out of one class, average attendance was 30.1 At the end of two weeks, the inside clerks averaged about 75% correct cards.

During the sessions, incidentally, preference is given to these clerks who will actually operate the punched-card equipment at the end of the changeover. However, we have yet to say "no" to anyone who wishes to take the course.

In the third week, training begins gradually on the rest of the IBM equipment. Personnel are taught how to place paper into an accounting machine, how to convert cards to tape, etc. Also, the cutover begins with trained personnel working alongside the trainees. Each day more of the operation is transferred over to punched cards until at the end of two weeks or so, it is all on.

The St. Louis, Houston, and Alexandria, La., yard offices are scheduled to be cut over this spring.

Others to be cut over

Originally, it was planned that 43 other car reporting stations would remain with teleprinter equipment. However, the recent development of new, low-cost card transmission units makes it likely that many of these will also be switched to punched card reporting. Those that remain on teleprinters will do so with a disciplined format suitable for punched-card conversion.

Another, similar retraining program is also under way at MP. We are setting up two regional accounting offices and teaching keypunch operation to general clerks. About 30 are involved, ten at each office.

This author and his three-man training staff are conducting this program, too, using the same Perceptual Development Labs films and projector. These have been very effective. Our only regret now is that we did not have PDL prepare a set of custom films on keypunching from our own waybills.

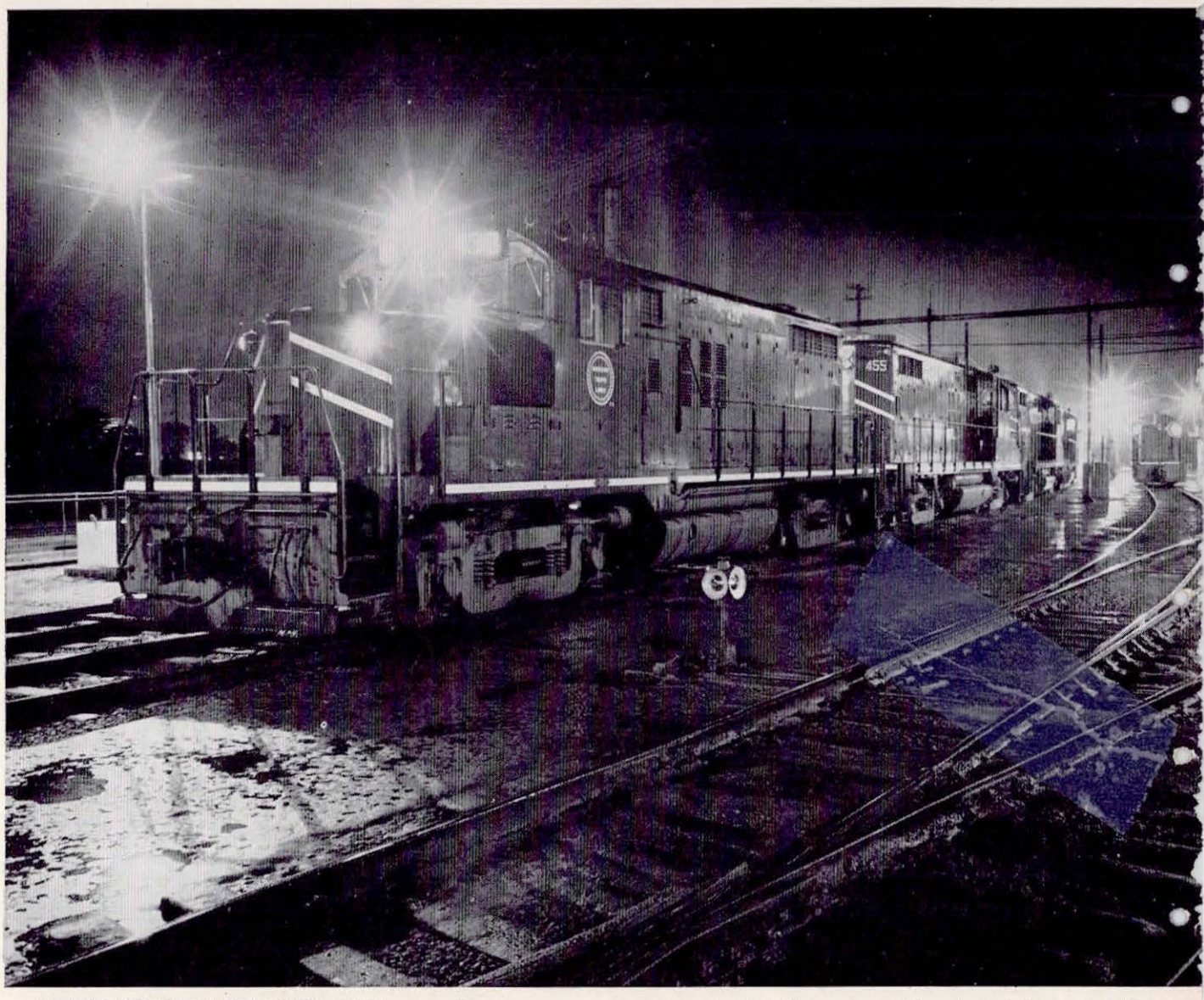
But, to indicate what a job the films do, we have even used them to help speed up the full-time keypunch operators in the data processing department.

In recent months, articles have been written and speeches made expressing the opinion that retraining of potentially-displaced workers is an un-achievable ideal in many cases.

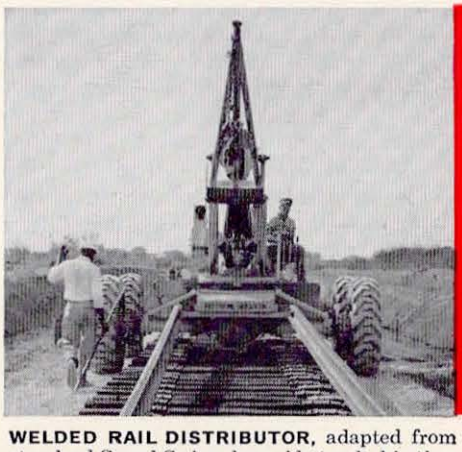
Re-education of a few hundred employees of MP and its subsidiaries does not constitute a devastating rebuttal to these opinions, of course. But our success does indicate that, where the teachers have the tools and the students the will, new skills can be learned effectively and economically.

Thus, employees who know their industry can move ahead as it does. Labor problems and morale difficulties can be minimized, and railroads can protect both the employees and their investment in them.

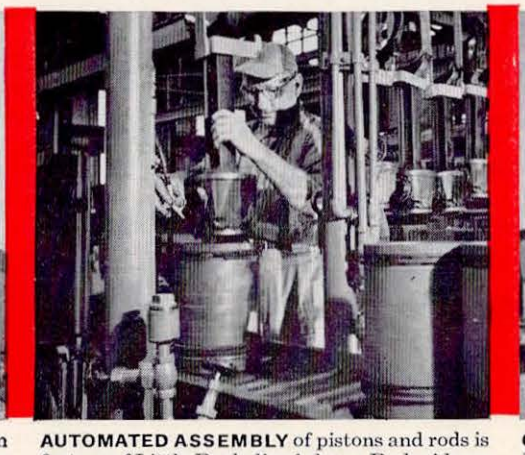
How MOPAC meets the



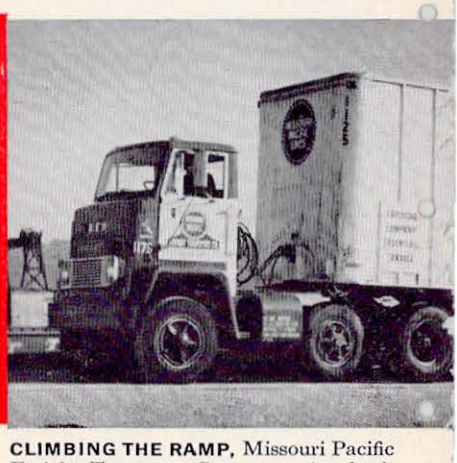
MOPAC RECEIVED DELIVERY of 100 new and more powerful locomotives in 1962, placed orders for 56 more . . . also ordered more than 3,000 new freight cars in the past two years—most of which are specially designed to meet the changing needs of shippers—and made sweeping improvements in shops, yards, track, offices and communications.



WELDED RAIL DISTRIBUTOR, adapted from standard Speed Swing, has wide track, big tires and 4-wheel steering to facilitate placement of 1440-foot welded rail. In 1963, 100 miles of new rail and 95 miles of relay rail will be laid.



AUTOMATED ASSEMBLY of pistons and rods is feature of Little Rock diesel shops. Rods ride on carriers hanging from monorail, are dropped into piston carriers for pin installation. Good PM practice reduces operating expense sharply.



CLIMBING THE RAMP, Missouri Pacific Freight Transport Company piggyback unit symbolizes the railroad's expansion in truck-rail service. In the course of building this service, MoPac has established

challenge of modern railroading!

Furthers broad improvement of roadway and equipment in the rapidly expanding area it serves.

Radiating a new vitality throughout its 11,000-mile system, Missouri Pacific is taking advantage of the latest developments in railroading. MoPac is modernizing, streamlining to provide the best possible service for passengers and shippers, to compete more intensively for business and to meet demands of the growing economy in its midwest, south and southwest territory.

The short-range tactic: spend money to cut costs, step up service. Physical improvements to roadway and equipment totaling $74,000,000 in the past two years trimmed operating expenses last year while revenues climbed.

Long-range strategy is designed to continue to boost service, revenues and efficiency. MoPac has armed itself with new incentive rates, increased the frequency and speed of its Red Ball freights, is vigorously promoting piggyback service and, in cooperation with the Texas-Pacific and Southern Pacific, has inaugurated second-day delivery from St. Louis to Los Angeles. With 552 new industries or expansions in the MoPac area in the past two years alone, the line should see a continuing payoff from its militant march toward increased traffic and profitability.

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Mobil lubricants, Mobil diesel fuels, and Mobil experience play a prominent part in the operation and maintenance of railroad rolling stock. Here are some of the ways in which Mobil may be able to help you:

PRODUCT—Mobil products have proven themselves in years of actual performance on America's leading railroads. They're always of highest quality . . . uniformly consistent.

RESEARCH—Mobil's never-ending research on fuels, lubricants, and refining processes results in continually improved products for you.

SPECIAL PERSONAL SERVICE—Mobil research laboratories assist customers with specific problems involving application of products.

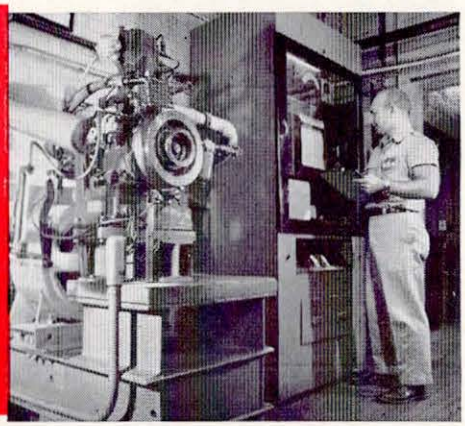
ENGINEERING ASSISTANCE—Mobil men average over 25 years' experience, understand not only petroleum products . . . but railroading, too.

TECHNICAL INFORMATION—Mobil freely distributes technical information to interested railroad personnel. Both the pros and cons of technical problems are thoroughly and frankly presented.

SUPPLY POINTS—Location of 13 refineries and 20 product-compounding plants provides convenient supply.

interchange with some 300 motor carriers, providing joint service in MoPac territory. In addition to serving the fuel and lube requirements of the railroad, Mobil supplies the truck fleet needs, too.

WHEEL TRUING is accomplished without demounting, on a Standard Wheel Truing machine. A new wheel shop will be built at North Little Rock this year, where all wheel maintenance for the system will be carried out.



SINGLE CYLINDER LAUSON utilizes special fuels, precise temperature controls . . . runs 60 hours per test in continuing evaluation of diesel engine lube oils. Mobil has supplied MoPac with fuels, oils and special products for many years.

Coal Interests Hail Rate Cuts

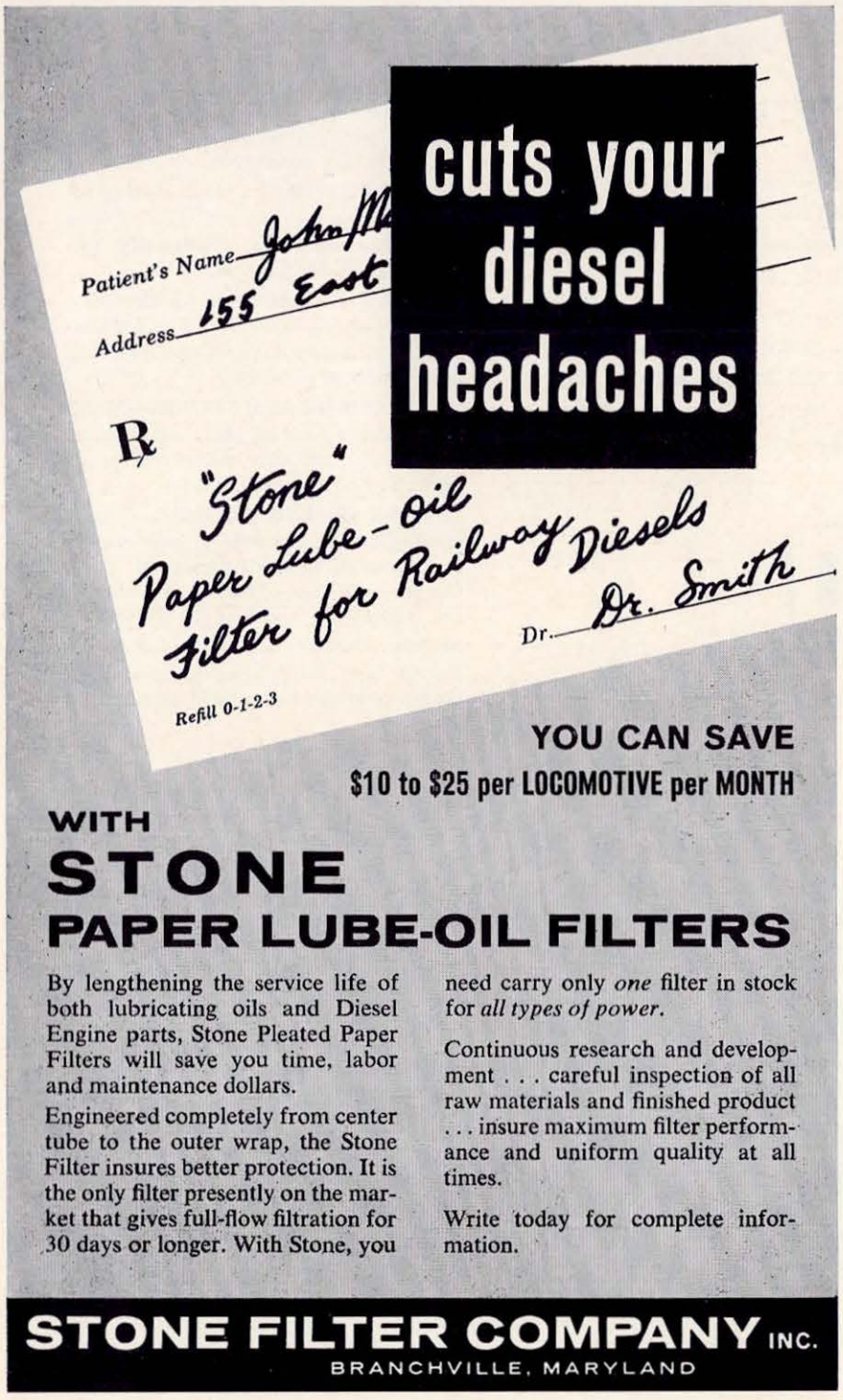
Recent reductions in railroad rates on coal should eliminate coal-slurry pipelines as competitors, according to coal-industry and utility executives attending the annual meeting of the National Coal Policy Conference in Washington April 4.

The conference is an organization composed of coal companies, coal-carrying railroads, utility companies, coal equipment manufacturers and the United Mine Workers of America. Its new chairman is Joseph P. Routh, who is also chairman of the Pittston Co. As head of the conference, he succeeded John L. Lewis, retired president of UMW.

The conference has no position on the issue of eminent-domain rights for coal-slurry pipelines, which are opposed by the railroads. While utility executives present indicated that the new rate adjustment would keep the business on the railroads, they wouldn't say that the utilities' interest in coal-slurry lines would not continue.

As for the coal industry, Mr. Routh expressed his belief that it has "hit bottom" after having passed through "four years of great problems and difficulties." He reported, however, that it still has difficulty competing with imported residual fuel oil, and it is not satisfied with the present quotas for such imports. Meanwhile, the conference's president, Joseph E. Moody, reported that coal mining has become so efficient in this country that U.S. coal can be delivered in any port in the world cheaper than other countries can produce it.

Proceedings of the meeting included a luncheon session honoring Mr. Lewis on the occasion of his retirement as chairman. Among other tributes, Mr. Lewis was cited for "great intelligence and wisdom in recognizing that we must have increased productivity," because "without his courage in not condoning featherbedding we would not have been able to make progress."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By lengthening the service life of both lubricating oils and Diesel Engine parts, Stone Pleated Paper Filters will save you time, labor and maintenance dollars.
Engineered completely from center tube to the outer wrap, the Stone Filter insures better protection. It is the only filter presently on the market that gives full-flow filtration for 30 days or longer. With Stone, you need carry only one filter in stock for all types of power.
Continuous research and development . . . careful inspection of all raw materials and finished product . . . insure maximum filter performance and uniform quality at all times.
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BRANCHVILLE, MARYLAND

New Service for Mexican Railways

The National Railways of Mexico, in conjunction with the Southeastern and the United of Yucatan, have introduced a tri-weekly service direct from Vera Cruz to Merida with through sleeping and dining car service from Mexico City. The new service has been made possible by a series of improvements following completion of the Southeastern in 1950; standardization of the gauge of the United from Campeche to Merida in the mid '50's; completion of Mexico's largest bridge, over the Coatzacoalcos River, in 1962; and the concurrent opening of a 9-mile cutoff on the National Railways route from Coatzacoalcos to Vera Cruz.

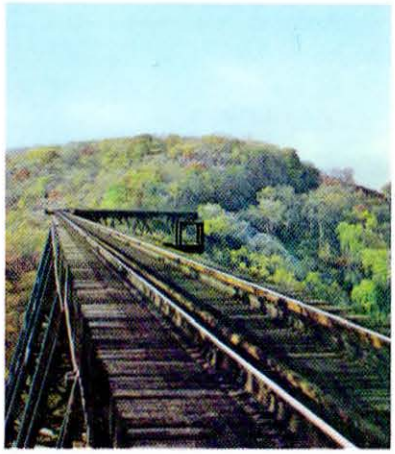
Travel to Yucatan, prior to initiation of the new service, required the use of four separate trains, including one mixed train; and a ferry; and included two overnight stops.

Palenque, in the State of Chiapas, is now accessible without the hardships formerly involved. Palenque, an inland town, has no highway and no airport.

It is now possible to travel by Pullman from St. Louis to Merida, 2,401 miles, with a change only at Mexico City.

How P&WV reduced track maintenance on this 200-ft-high bridge

A long P&WV drag rumbles across the towering bridge, on Bethlehem fully-treated rails.



This 200-ft-high curving trestle was costly for the Pittsburgh & West Virginia to maintain. Fully heat-treated rails laid in 1960 will multiply rail life, thus greatly lengthening the intervals between rail replacements.

Rail life multiplied by Bethlehem fully heat-treated rails

Build an open-deck bridge 200 feet above a valley floor . . . bend it in a 5-degree curve . . . and there you have a piece of railroad that's striking to the eye but rough on the M of W budget.

We're talking about the Pittsburgh & West Virginia Railway's impressive span near Pittsburgh, Pa. The P&WV found an answer to the maintenance problem by replacing the control-cooled rails in 1960 with Bethlehem 115 RE fully heat-treated rails. Objective: longer life between re-layings.

Like many other railroads, they have been impressed with the long service life of Bethlehem fully-treated rails in difficult, heavy-traffic installations. Three, four, six, and even seven times longer service records are being rung up by heat-treated rails on leading roads across the country.

We have accumulated a wealth of performance data on Bethlehem heat-treated rails, and we would like to discuss our findings with you. A phone call or note to our nearest office will put a Bethlehem engineer in touch with you promptly.

BETHLEHEM STEEL

BETHLEHEM STEEL

Thanks to the king-size flat car . . .

more new automobiles than ever

When you see a long string of tri-level flat cars loaded with Detroit's new models, you're witnessing the new vitality that stirs the railroad industry. In ever-increasing numbers, these 85-footers are proving that there are jobs which the railroads can do better than any other mode of transportation.

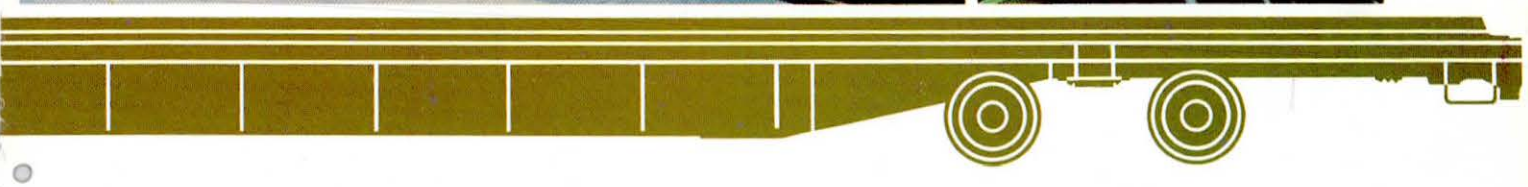
Bethlehem built the original two-trailer flats nearly eight years ago. Since then, over 2,000 king-size flat cars have been built in Bethlehem's modern car shops. Many hundreds more are rolling on wheels and axles forged and rolled by Bethlehem.

Steel

Steel for strength

THIS 85-FT FLAT CAR, displayed at the Allied Railway Supply Association exhibit in Chicago, is equipped with the latest in cushioning, and braking devices. It can carry trailers, auto racks, and containers with equal safety and efficiency.

IN-SERVICE TESTING is a continuing part of Bethlehem's freight-car development program. Here, special instruments in caboose, wired to adjacent piggyback car, enable Bethlehem engineers to study dynamic stresses in normal freight-train service conditions.



now are going by train

Carry All Three: Auto Racks, Trailers, Containers

Bethlehem's expanding research and development program is steadily refining the design and improving the quality of piggyback flat cars (other types of freight cars too). Now, with Bethlehem-built 85-ft flat cars, you can carry auto racks, trailers, or containers with equal safety and efficiency.

All new concepts in engineering and equipment (underframe cushioning, for example) are thoroughly proved through complete performance and endurance tests on a prototype car. We'd like to talk to you about your needs and some of our new ideas.

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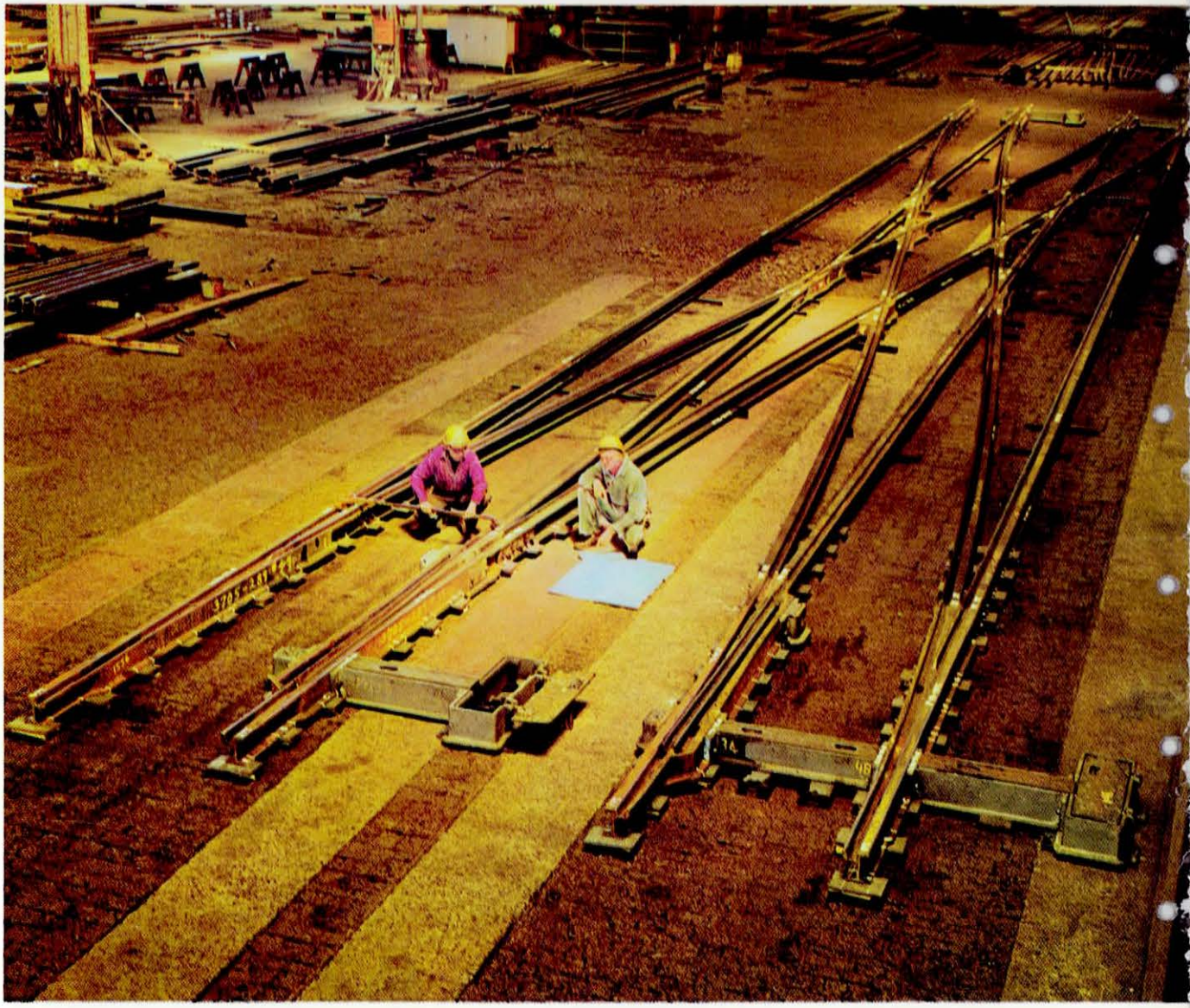
BETHLEHEM STEEL

Need special trackwork?



It's in good hands here . . .

This, of course, is a double crossover; it's getting a final once-over on the layout floor at our Steelton plant before being dismantled and shipped to the customer. The rail section is Bethlehem Girder Rail, made exclusively by Bethlehem for use in dockwork, city streets, and other paved areas.

Whether you need crossovers, double-slip switches, movable-point crossings, or girder rail trackwork, you can hand the problem to Bethlehem with complete confidence. We know how to fabricate the most complicated trackwork, and make it fit to a T.

Bethlehem special trackwork cuts costs by eliminating field cutting, curving, and drilling of rails. Every piece is match-marked for foolproof installation at your site. One of our engineers will be glad to discuss how special trackwork could solve some of your problems.

BETHLEHEM STEEL

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FREE GIRDER RAIL BOOKLET

If any of your trackwork is imbedded in pavement, you should know more about Bethlehem Girder Rail. Our Booklet 1818A is a portfolio of detail and alignment plans which you will find helpful. Write to Room 1047, Bethlehem Steel Co., Bethlehem, Pa.

This is one of more than 700
Norfolk & Western cars recently equipped with
Brenco *crown-taper* Roller Bearings

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BEARINGS

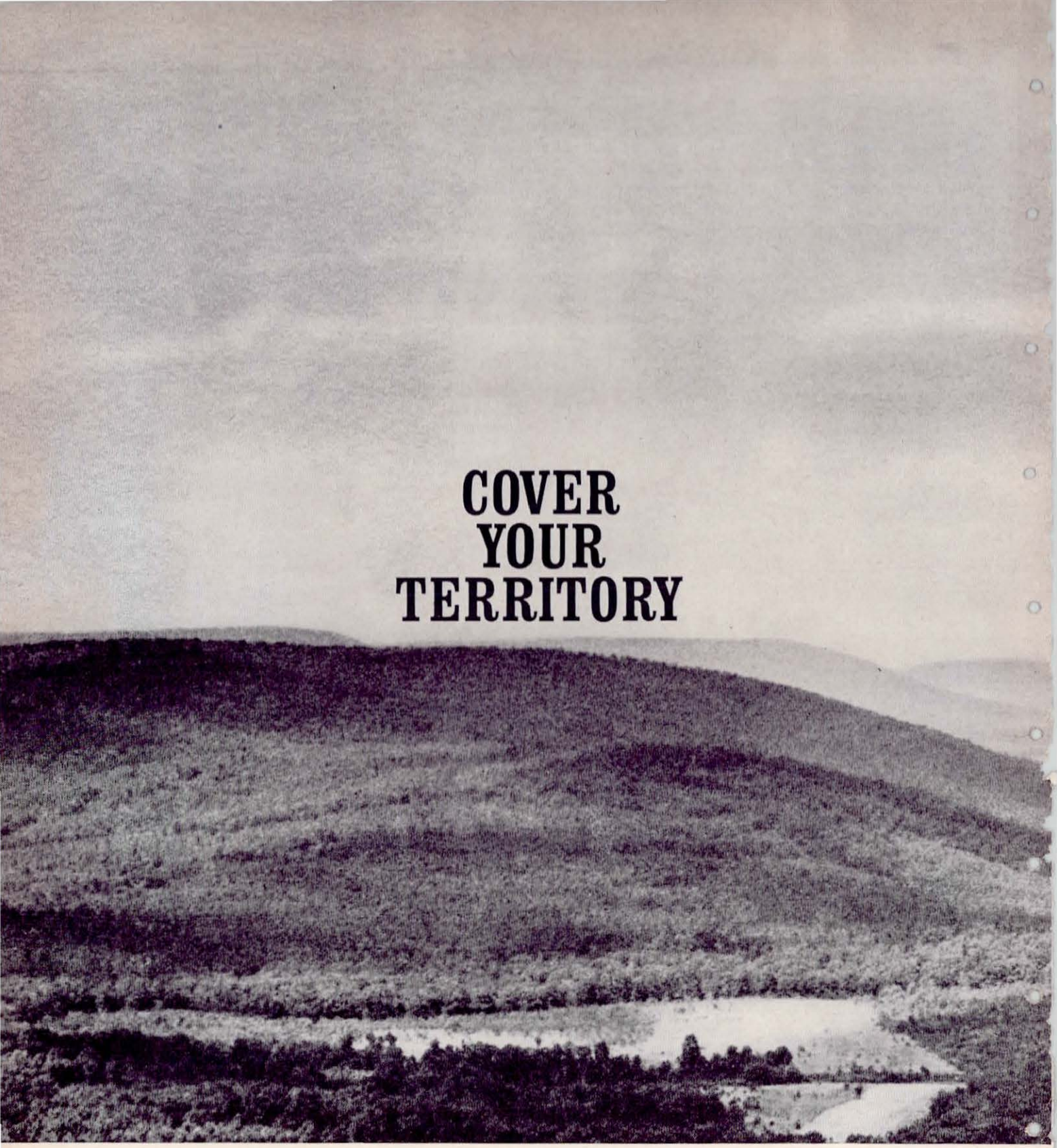
UNTIL 1962 MOST REA RATES ONLY SAVED MONEY ON LITTLE SHIPMENTS

In 1959 REA Express started making changes. And by 1962 REA brought its sweeping modernization plans into focus with extensive rate changes that bring you big savings in transportation and distribution. REA now has new realistic shipping rates on thousands of commodities, in heavier weight ranges than ever before. These new rates are generally competitive in weights up to 300 lbs.—even to 10,000 lbs. between certain points. And more commodities are being added every day!

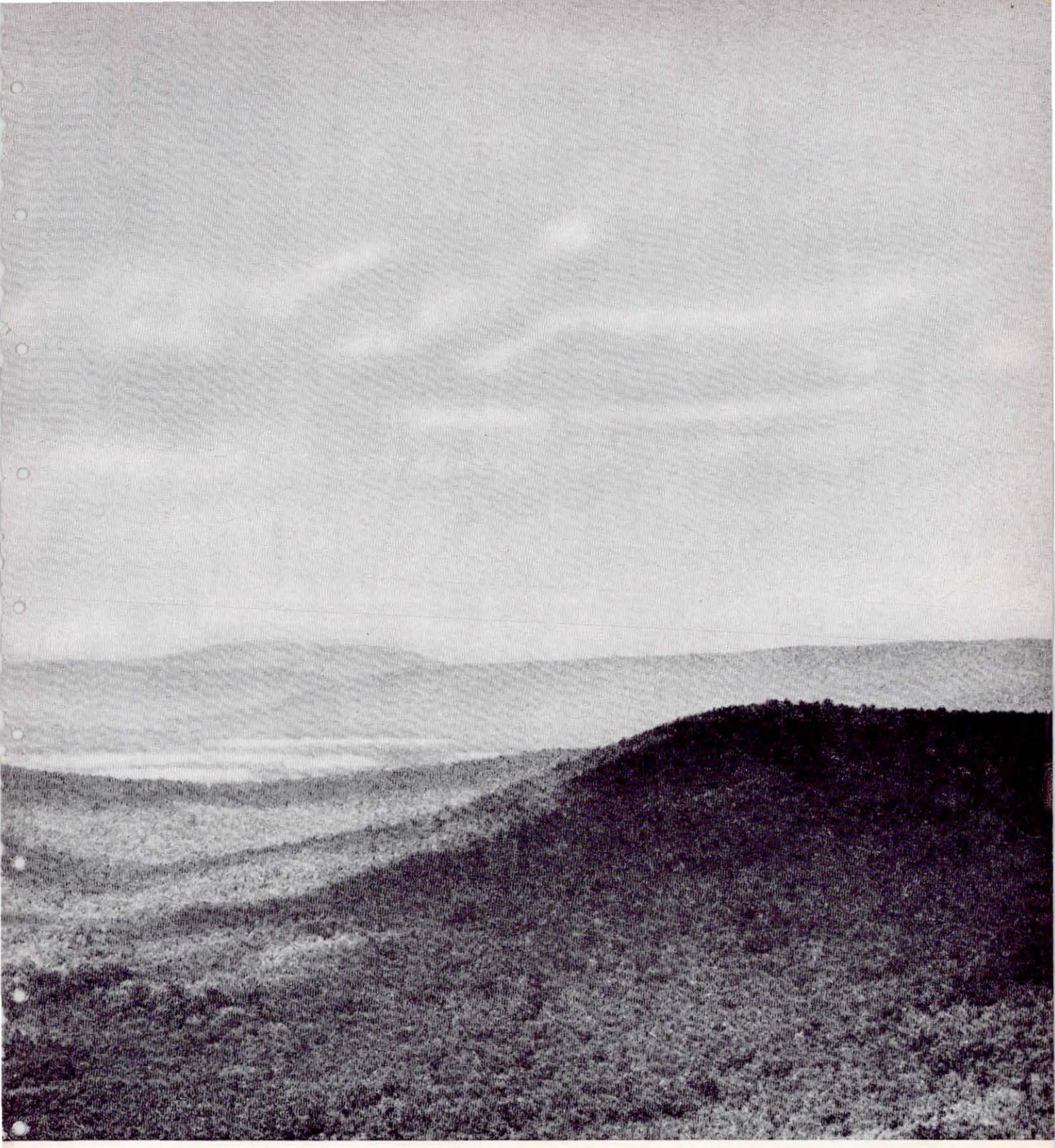
With this one basic change all the other REA advantages combine to form a unique shipping service. A service that cuts your distribution costs as well as your transportation costs. For example, costs can be drastically reduced by using REA as a mobile warehouse. Inventories keep moving and warehousing costs are kept to a minimum. Another thing, REA is the only carrier that picks up and delivers nationwide (within published limits). And whatever REA carries, it's always under sole REA responsibility. No transfers to other carriers—less loss, less damage and fewer complications all around. REA uses air, truck, ship or rail, or all four methods to assure the most efficient shipping. Air Express is available too, for shipments in a hurry. Let REA Express show you how you can cut your overall distribution costs nationwide and worldwide in 1963. For more information write: Sales Department, REA Express, 219 East 42nd Street, New York 17, N. Y. Or call your local REA representative.

REA EXPRESS

REA EXPRESS IS THE NEW NAME FOR RAILWAY EXPRESS AGENCY.



Keep in touch with microwave—from Graybar, specialist in communications! Whether you want to maintain contact with service crews . . . dispatch fleets . . . control distant equipment or operate any other communications system—call Graybar. A good example: the new Lynch LH700 Microwave unit combined with the Lynch B910A Multiplexing unit. Here's all solid-state reliability . . . a-c or battery operation—a complete space-saving modular microwave system that permits 2-way voice or data communications over from 1 to as many as 600 circuits. You simply "plug in" the capacity you need. With other Lynch systems, you can utilize existing power line or other circuits for your communications. □ Also from Graybar: complete



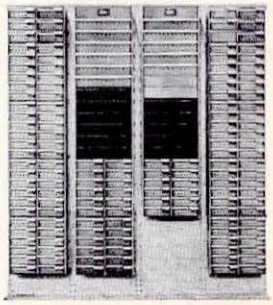
lines of auxiliary equipment, such as data sets, telephones, dial switchboards, wire and cable. Leasing and financing plans are available if you wish. Remember Graybar for every communications need—up to complete turnkey operations! Wherever you are...whatever you need—call Graybar—for everything. Graybar Electric Company, Inc.: local service—nationwide—in 140 principal cities.

GraybaR

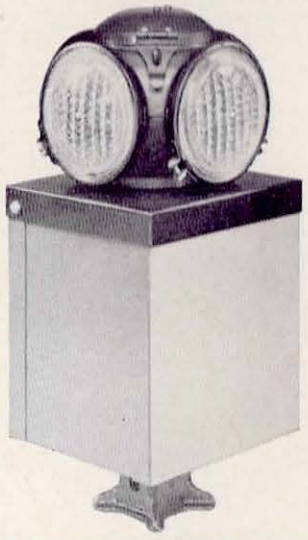
772

New LH700 microwave unit

B910A multiplexing unit



This lamp lights itself



This combination switch lamp and battery box turns itself on and off automatically. Battery lasts much longer—and can be changed with greater ease. Spherical lamp body resists damage as no other shape can. Ductile iron base is spring mounted to absorb shock. Sockets are furnished to fit the switch stand tips of every railroad. Unit is available in stainless or cold rolled steel. Enameled targets. Colors as desired. For full information, call your Adlake Man or Adlake direct.

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RAILROADING AFTER HOURS WITH JIM LYNE

LYNE

BORN TOO LATE—A leather-bound booklet of approximately 16 handsomely engraved pages, commemorating the "complimentary entertainments" provided for the American Railway Master Mechanics Association at its Philadelphia convention Sept. 14-17, 1870, has been shown to me by Eads Johnson, of American Brake Shoe, who borrowed it from his colleague, John Hutchins. Among the names appearing on committee lists were a John Sellers, Jr., and William Sellers—forebears of John Hutchins.

Besides sundry concerts, theater parties and a carriage ride through "the park," there was a boat-and-train trip to Cape May, on the "West Jersey Railroad." The menu of one of several banquets featured two kinds of fish, six sorts of meat (plus three kinds of game) and eight varieties of alcoholic beverages. This was in the days prior to the reign of Tax Commissioner Mort Caplin.

COMPUTER GAME AT STANFORD—At the Stanford University Transportation Management Program this summer, a feature of the program will be computer "games," to study such factors as speed of delivery, transportation expense, and consumer satisfaction—so reports the director of the program, Dr. Karl M. Ruppenthal. There will be a course in "business logistics," headed jointly by Professor Gayton Germane and Dr. Grosvenor Plowman (who is a visiting professor at Stanford, in addition to his duties as deputy under secretary in the Commerce Department).

Incidentally, I got mixed up in the middle of one of those computer games at a session of the CN management school at Lennoxville, P.Q., a couple of summers ago—and I still haven't been able to figure out just what was going on. I wonder just how Prof. Ruppenthal is going to quantify "customer satisfaction" so he can put it into the think tank.

HOW DIVERSIFYING PAYS—The Southern Pacific's trucking subsidiaries (I note with interest in the company's annual report) attained gross revenue of over $67 million in 1962, an increase of 14% over the preceding year; and the operation produced net income of more than $3 million after taxes. The company's pipeline subsidiary tallied up net income of close to $6 million on a gross of $17 million.

EXECUTIVE ANONYMITY?—I know a railroad vice president who, every time he gets with a group of people, is likely to ask them to name the chief executive officer of a half-dozen or so of the largest industrial corporations. I've watched this operation, and my guess is that the respondents don't come up with the right answers more than 20% of the time. I saw a list of eight industrial companies the other day that had just got into the billion-dollar (sales) class, and was unable, without help, to name the head man of any one of them.

What's going on here anyhow? Is it company policy to keep the spotlight off the No. 1 man? If so, why?

BUG TUSSLE AND BISON—Frisco's district sales manager at Joplin—L.A. Tidewell—calls my attention to a community name in Texas, "Bug Tussle." There are two such places in the Lone Star State. he reports—one in Grayson county and another in Fannin county. I like these homely town names, myself, but pretentiousness often overwhelms them. I recall, for instance, that the original name of a high-grade suburban center in New Jersey used to be Cranetown (a local family name), but for a long time now has been a meaningless Montclair.

Speaking of appropriate names—how about "Bison" for the new E-L-NKP yard at Buffalo?

GENEROUS TO OUR RIVALS—The Milwaukee has taken the trouble to find out, and publicize, the amounts it pays in taxes in support of local airports—compared with payments for this purpose by the airlines that use them. At Bozeman, for example, the Milwaukee pays $1,441 to keep the airport going, and the airline that uses it pays $85. At Miles City the railroad pays $765 and the airline $5.10. This is like it would be to tax the WCTU to promote the beer business.

British Railways: Drastic Medicine

The 'Beeching cure' for Britain's ailing rail system would involve abandonment of passenger service on 5,000 route miles, reshaping of freight service, sharp cuts in employment.

Dr. Richard Beeching, who was hired two years ago to stem the flow of red ink on British Railways, has completed his diagnosis. His treatment —outlined in a 148-page report entitled, "The Reshaping of British Railways"—is as drastic as had been predicted. The Beeching cure, which is aimed at eliminating "most, if not all" of BR's deficit (now running over $420 million a year) by 1970, will be taken up by the British Parliament this month. If adopted, it will mean widescale abandonment of passenger services and substantial alterations in freight services.

Dr. Beeching's recommendations are based on traffic studies which have been carried out in Britain over the last two years. The studies showed that half of the 17,830-mile British Railways system is carrying only 4% of total passenger traffic and 5% of total freight traffic.

Mindful of this situation and the fact that BR has not turned a profit since 1953, Dr. Beeching is more than ever convinced "that railways should be used to meet that part of the total transport requirements of the country for which they offer the best available means and that they should cease to do things for which they are ill suited."

● **The doctor's prescription.** To put BR back on its financial feet, Dr. Beeching has recommended the following major steps which he estimates will save BR between $300 million and $412 million a year:

● Abandonment of passenger service on 5,000 route miles (about 68 million train miles a year) and closure of 2,128 passenger stations. This mostly involves cutting services or local trains which have long failed to cover costs. Despite serious inroads into passenger traffic in Britain made by the private automobile and airlines, the British Railways Board believes there is still a substantial market in intercity rail passenger traffic. Present plans are to improve these services on a selective basis. Suburban services feeding London come close to covering full expenses, but those to other cities are losing heavily. Although Dr. Beeching mentions no specific figure in his report, there is a good chance that the BRB will soon recommend a 10% hike in suburban fares. Annual savings from the discontinuance of passenger services, closing of stations and the subsequent abandonment of lines that will result are estimated at $84 million.

● Reduction of the number of stations handling LCL traffic—now around 950—to 100 main depots. BR, which handles only about 45% of this type of freight in Britain, lost an estimated $60 million on its LCL traffic in 1961.

● Increasing block-train movement of coal by (1) inducing the National Coal Board to provide train loading facilities at collieries, and (2) inducing the establishment of coal concentration depots in collaboration with the National Coal Board and the distributors. While coal traffic as a whole just about pays its way, economical rail movement in Britain is hampered because major production is by small collieries, few of which are equipped with loading or storage facilities. Thus, the railways are forced to provide cars as storage bunkers, and the demurrage charges paid by the Coal Board at present fail to cover costs by about $28 million a year. The absence of adequate loading and unloading facilities also prevents BR from handling much of this traffic in through trains, and about two thirds of the coal tonnage handled by rail in Britain still moves by the carload.

● Scrapping of at least 348,000 freight cars over the next three years (at the end of 1962 BR's freight car fleet totaled 848,591 cars), and reduction of the passenger fleet by 2,957 coaches and 1,074 multiple-unit cars.

● Continued reductions in manpower. At the end of 1962, BR employed a total of 474,438 people (about 27% fewer than in 1948) which accounted for about 60% of its total costs. Employment on the system was reduced by 25,896 in 1962, and while Dr. Beeching contends that reductions in the next few years need not exceed the 1962 rate, unofficial estimates are that implementation of his recommendations will cost at least 70,000 jobs.

● Introduction of a fleet of fast

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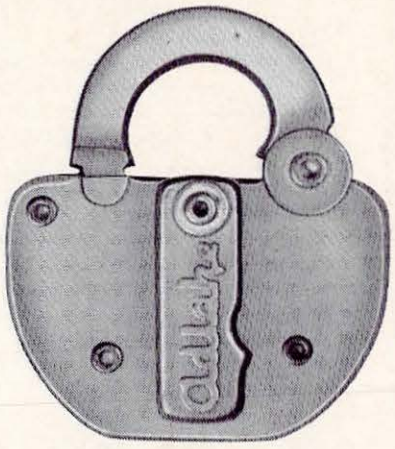
TOUGH!



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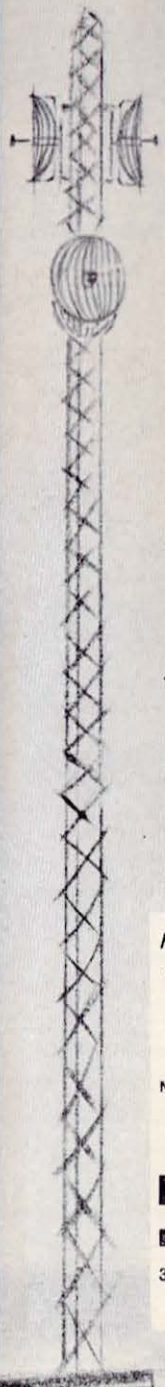

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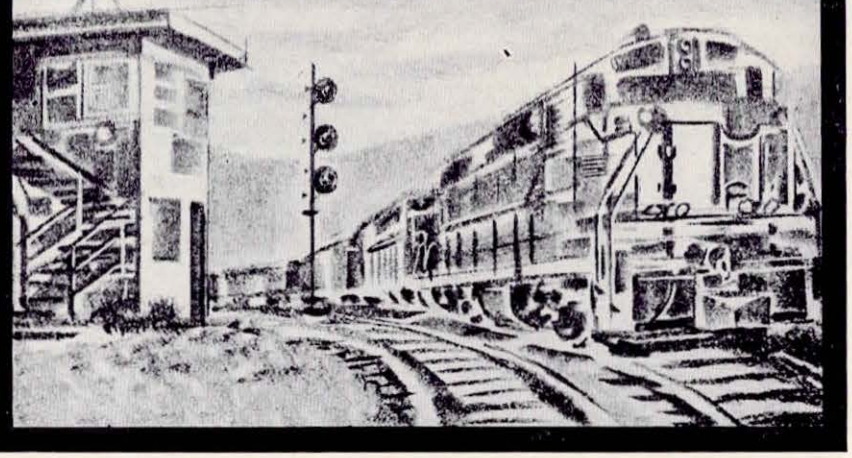


Liner Trains to handle freight in containers on scheduled services. This is the most radical of the concepts in the Beeching plan and the one on which most hope for reducing BR's freight losses hinges. The Liner Trains, which would consist of permanently-coupled flat cars, 42 feet, 6 inches long, capable of handling 10 or 16-ton containers, would handle general merchandise, LCL and parcel post traffic between 55 specially-designed terminals on passenger train schedules. The BRB is expected to put forward proposals for construction of the first two Liner Trains in the near future, and these may be in operation on the London-Liverpool and Sheffield-London-Birmingham routes by the end of 1964.

• **1970 target date.** The full network as envisioned by Dr. Beeching, however, would not be in operation before 1970. The cost of constructing the planned 55 terminals, plus loading and unloading equipment, locomotives, flat cars, containers and road vehicles needed for the Liner Train operation, is estimated at $280 million. Against this, Dr. Beeching estimates that the Liner Trains would bring back to the rails about 16 million tons a year now being handled by highway carriers. In addition they would handle about 10-12 million tons of merchandise traffic and 3-4 million tons of parcel post and LCL traffic that is now being handled uneconomically by other rail services. By 1970, according to Dr. Beeching, the Liner Train service should make an annual contribution to BR revenues of $35 million over direct costs. By comparison carload merchandise traffic now on the rails fails to cover its direct costs by some $87 million a year, Dr. Beeching estimates.

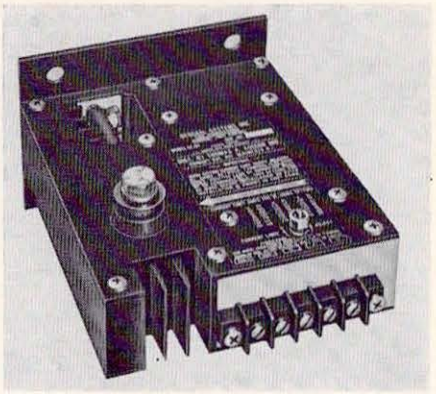
• **Acceleration of dieselization.** At the end of 1962 BR was operating 1,849 diesel and electric locomotives. The Beeching report, assuming adoption of the plan, puts BR needs at between 3,750 and 4,250 units, which will enable BR to retire the remainder of its steam locomotives and meet any potential increases in traffic.

• **Government supports plan.** Achievement of the goal of the Beeching plan—to eliminate "most, if not all" of BR's deficit by 1970—depends largely on how much of the plan is adopted and how fast it is put into effect. The plan already has the backing of the British government, which has announced its intention to put Dr. Beeching's major proposals into effect within the next three years. The timetable is a tight one. Local authorities, industry road transport and other interests have been asked to have their views in by mid-April. The report is scheduled for debate in the House of Commons after Easter and in the House of Lords in May.

NEW PRODUCTS REPORT

Radio Transmitter (RA-1)

A hand-held radio transmitter operating in the 130-174 mc range has a power output of 500 milliwatts. The unit measures approximately 6 by 3 by 1 inches and weighs 12 oz. The transistorized radio is powered by two 8-volt batteries, replaceable or rechargeable. Cased in plastic, Voice Mate radio fits in the hand or shirt pocket. It also may be worn in a holster-type case on a belt or on a strap over the shoulder. *General Electric Co.*



Current Limiter (RA-2)

A new completely solid-state current limit control is an accessory to the model 101 series of solid-state voltage regulators for 37-volt, 75-volt and 125-volt auxiliary generator charging systems. The new unit (model CL 101) is externally adjustable between 50 and 100 amp. Used in conjunction with the series 101 regulators, it replaces the limiting resistor and/or measuring shunt required on most auxiliary systems. *Thomas A. Edison Industries.*

Automatic Writers (RA-3)

The 5-channel Flexowriter automatic writing machine now has available as standard equipment connections for tape and edge-punched card reading units. In addition, a solenoid adding machine is available to provide automatic adding-listing. Preparation of invoices, sales orders, purchase orders and inventories is automatic. This material may be transmitted to distant locations over existing teleprinter communications lines. *Friden Inc.*

Aluminum Cleaner (RA-4)

Trailer-Glo, a non-viscous, one-application aluminum cleaner and brightener, is a combination of acid-type detergents and wetting agent. It goes into solution without predissolving and mixing, and cuts through diesel exhaust stains and dulling films caused by weathering, also flushing off heavy road soils. For vehicles washed regularly, it can be diluted from 1:9 to 1:19 with water; for corroded aluminum surfaces, 1:1 to 1:5. *Wyandotte Chemical Corp.*

Wear Plate (RA-6)

The Nelson WP-10 side frame wear plate for unit brake beams is said to completely protect the side frame pocket. The flangeless sides give more bearing support surface for the brake beam ends. With no inner projections in the pocket, the design allows complete freedom of beam movement and proper alignment. The plate is formed from C-1084 heat-treated spring steel. Shipping weight is 24 lb per car set. *Mid-West Forging & Manufacturing.*

Epoxy Coating (RA-5)

Epoxy Resin is said to protect metal surfaces from the action of fresh or salt water, most chemicals, and gases and fumes in the air. It is applied with brush, roller, or spray to any surface free of loose scale, dirt and grease. For maximum protection under difficult conditions, three coats are recommended, the third coat being available in a range of colors. An attractive tile-like surface is said to result. *Philadelphia Resins Co.*

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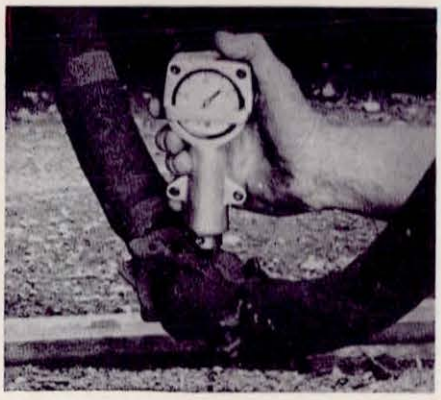
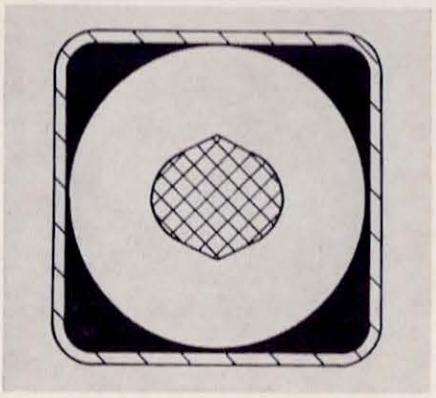


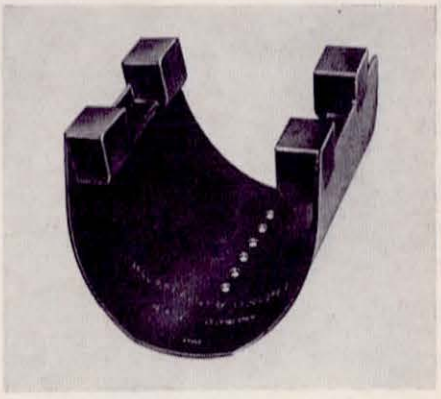
Train-Line Gauge (RA-7)

The need to close angle cocks, break hoses, and check for pressure at ten or more car intervals is eliminated with the Peacock No. 1460 train-line gauge. Gasket guard No. 1695 is inserted between couplings. A push on top of unit itself then inserts a needle between coupling gaskets so train-line pressure can be read from face of unit. The device, according to manufacturer, reduces train-line leak detection time by at least 75%. *Ellcon-National, Inc.*



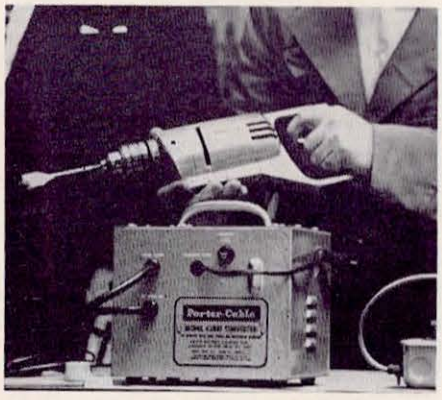
More Battery Power (RA-8)

A power boost averaging 18% in Exide-Ironclad lead-acid motive-power batteries has greatly increased the potential usefulness of most electrically powered material-handling vehicles at reduced costs per ampere-hour, according to manufacturer. Five new models utilize square-, instead of round-, shaped, higher-porosity tubing that adds power by providing more active material (shaded area in cross-section) grid spines. *Electric Storage Battery Co.*



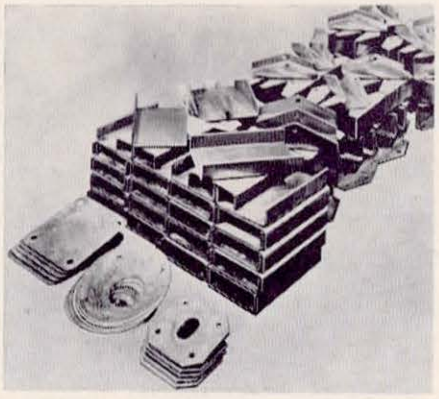
Journal Stop (RA-9)

The Security Buna "N" Journal Stop is designed to provide maximum stabilization for journal-box components. The one-piece unit locks in place by straddling the journal box columns. Installation is made without dismantling truck side frames. The stop has AAR approval for test in interchange service. It may be installed with any lubricator; the rubber mat is said to protect pad bottom against wear and tear. *Security Railway Products Co.*



Power Converter (RA-10)

Universal operation of battery-powered tools can be attained with a power converter which reduces 110-volt a-c power to the proper voltage to drive portable electric tools powered by universal motors. It can also be used to recharge nickel-cadmium batteries and will operate present Porter-Cable battery drills. Tools may be operated from the converter plugged into electrical outlets, or from small, belt-hung batteries. *Rockwell Manufacturing Co.*



Prehardened Steel Parts (RA-11)

A heat treatment which prehardens high-carbon manganese steel is said to extend wear life of heavy duty components such as conveyor and excavator parts, bearings, bushings, liners for bins and shot blast, and chutes. The process prehardens the steel before it is placed in service. Hardness and ductility can be controlled to meet specific needs. Hardness ranges to 43 Rockwell C with the capacity to work harden to 55-65. *Manganese Steel Forge.*

Portable Megohmmeter (RA-12)

A new portable megohmmeter can measure resistances as great as 10 million megohms at 500 volts dc or 1 million megohms at 50 volts dc. This model 2850 Vibrotest operates on 115-volt ac, eliminating the need for hand cranking or batteries. The 4-inch scale is calibrated from 1 to 100 megohms and may be multiplied by a rotary switch. At 500 volts dc, accuracy is plus or minus 2%, and plus or minus 5% at 50 volts dc. *Associated Research Inc.*

Market Outlook

Carloadings

Loadings of revenue freight in the week ended April 6 were not available as this issue went to press.

PIGGYBACK CARLOADINGS.—U.S. piggyback loadings for the week ended March 30 totaled 16,449 cars, a new weekly record, compared with 13,701 for the corresponding 1962 week. Loadings for 1963 up to March 30 totaled 186,899 cars, compared with 163,902 for the corresponding period of 1962.

IN CANADA.—Carloadings for the seven-day period ended March 21 totaled 60,619 cars, compared with 60,847 (revised) for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
March 21, 1963 ...	60,619	24,201
March 21, 1962 ...	65,138	24,168
Cumulative Totals		
March 21, 1963 ...	691,617	257,549
March 21, 1962 ...	694,307	267,895

Big PATH Car Order Awaits Court Verdict

Orders for 250 new cars for the Port Authority Trans-Hudson Corp. probably won't be placed until the U. S. Supreme Court rules on the legality of the Port Authority's takeover of the former Hudson & Manhattan tubes.

Bids on the big order were returned unopened to five suppliers after the Appellate Division of the Supreme Court of the State of New York held the takeover unconstitutional (RA, Feb. 25, p. 10). Now, New York's highest court—the Court of Appeals—has reversed this decision. But opposing New York business interests say they will take their appeal to the U.S. Supreme Court.

Pending final decision on the court action, PATH last week pledged to do "everything possible to be ready to move swiftly with our modernization program when all legal obstacles have been removed."

The still-unopened bids on the new PATH cars came from Pullman-Standard, Budd, St. Louis Car, Grumman Aircraft Engineering Corp. and Hitachi New York (acting for a Japanese car-building firm).

New Equipment

FREIGHT-TRAIN CARS

► *Fruit Growers Express.*—Will build 377 RB and RBL bunkerless insulated cars costing almost $7 million at its Alexandria, Va., shop starting in June. A building program which produced 399 similar cars has just been completed there. The new cars will have hydraulically-cushioned underframes with 20-inch travel, 10-foot doors, lading protection devices, side fillers, special flooring, and roller bearings.

► *Louisville & Nashville.*—Will equip 10 conventional gondola cars with 11 300-cu-ft-capacity containers per car for shipment of foundry coke directly into plants where the containers will be lifted by overhead cranes, emptied through bottom-drop doors, and returned to the car.

LOCOMOTIVES

► *Reading.*—Plans to purchase 56 new diesel-electric locomotives at a cost of approximately $11 million. The acquisition will be financed with part of the proceeds of a $30-million loan for which Reading has asked a federal-government guaranty. A portion of the loan will also be used to equip 94 existing locomotives with new engines.

► *Western Pacific.*—Directors authorized the purchase of new equipment to cost an estimated $2,687,000. Included are 10 2,250-hp diesel-electric locomotives.

FOREIGN

► *Dominican Republic.*—Azucarera Haina, a sugar company, has purchased three 45-ton diesel-electric locomotives from General Electric. The new order brings to 20 the number of GE locomotives in the company's service.

New Facilities

► *Atlantic Coast Line.*—Ordered 60 sets of 2R series transistorized radio equipment from Union Switch & Signal division of WABCO for installation on locomotives.

► *Belt of Chicago.*—Has contracted with the Ellington Miller Co., Chicago, to build a $180,000 office building at Clearing, Ill. Scheduled completion date is June 1, 1963.

► *Canadian National.*—Ordered two Union UR control machines from Uniswitch Corp. to be installed at Toronto, Ont., yard. Traffic on all yard access lines, about 100 miles, will be directed from these route control interlocking machines.

► *Spokane, Portland & Seattle.*—During 1963 an additional 24 miles of main-line track will be relocated because of the John Day Lock and Dam project on the Columbia River. Corps of Engineers, U. S. Army, will contract the relocation at an estimated cost of $12 million. Related SP&S relocation work is now in progress under three other Corps of Engineers contracts totaling $7.5 million.

TENTATIVE SCHEDULE OF MEETINGS

American Railway Progress Exposition

The American Railway Progress Exposition will be formally opened next October 9 and will continue through October 16, as shown in the tentative program below. A series of meetings and special events will be held on the day preceding the formal opening. Unless otherwise indicated, all meetings and other functions will be held in Chicago's McCormick Place.

Tuesday, October 8

(Pre-Exposition Events)

ALL DAY —
- AREA committee meetings (Engineering Division, AAR)
- AREA Board of Direction Meeting (General Committee, Engineering Division, AAR)
- Committee of Direction, Communication and Signal Section, AAR Sheraton-Chicago Hotel

AFTERNOON —
- Preview for press of indoor and outdoor exhibits, with Public Relations committee as guide.

EVENING —
- Press reception and dinner. Selection of "Miss American Railroad"

Wednesday, October 9

(Formal Opening of Exposition)

ALL DAY —
- Official opening of indoor and outdoor exhibits.
- AREA membership meeting (Engineering Division, AAR), Banquet Room.
- Annual meeting, Communication and Signal Section, AAR, Chicago room.
- Committee meetings, Mechanical Division, AAR, Morrison Hotel and AAR Chicago office.
- Joint membership meeting of Station Operating Officers and Motor Transportation Officers, AAR member roads, Room 11.

MORNING —
- Annual meeting, Purchases & Stores Division, AAR, Little Theatre.
- Annual meeting, Railway Progress Institute.

AFTERNOON —
- Meeting, Board of Directors, AAR, Sheraton-Blackstone Hotel.

EVENING —
- RPI annual dinner, Conrad Hilton Hotel.

Thursday, October 10

MORNING —
- AAR Member road meeting, Little Theatre.
- Continuation of annual meeting, Communication and Signal Section — Chicago Room.
- Continuation of annual meeting, P&S Division, Lakeside Room.
- Continuation of AREA committee meetings.

12:15 or 12:30 —
- Joint Railroad-Suppliers luncheon.

AFTERNOON —
- Giant program, joint session of all groups with invited guests, Arie Crown Theatre.

EVENING —
- P&S Division dinner and entertainment — Morrison Hotel
- Communication and Signal Section banquet — Sheraton-Chicago Hotel.

Friday, October 11

MORNING —
- Continuation of annual meeting, Communication and Signal Section — Chicago Room.
- Continuation of annual meeting, P&S Division, Little Theatre.

ALL DAY —
- Annual meeting, Mechanical Division, AAR — Lakeside Room.
- Continuation of joint membership meeting of Station Operating Officers and Motor Transportation Officers, Room 11.

Saturday, October 12

Outdoor exhibits open all day to general public.
Indoor exhibits closed.

Sunday, October 13

Outdoor exhibits open all day to general public.
Indoor exhibits open 1:00 PM to 5:00 PM C.D.T. to railroads and selected public by invitation.

Monday, October 14

MORNING —
- Joint session of memberships of Roadmasters and Maintenance of Way Association and American Railway Bridge & Building Association, and the four Coordinated Associations, Aerie Crown Theater.

ALL DAY —
- Committee meetings, National Association of Shippers Advisory Boards.
- Membership meeting, Air Brake Association — Room 10.
- Membership meeting, Car Department Officers Association—Room 12.
- Membership meeting, Locomotive Maintenance Officers Association —Banquet Room.
- Membership meeting, Railway Fuel & Operating Officers Association — Room 11.

AFTERNOON —
- Annual meeting of Roadmasters and Maintenance of Way Association — Chicago Room.
- Annual meeting of American Railway Bridge & Building Association — Lakeside Room.

EVENING —
- Railway Supply Association dinner and entertainment — Morrison Hotel.

Tuesday, October 15

MORNING —
- Coordinated Associations meetings, LMOA, CDOA, ABA and RF&OOA.
- Continuation of annual meetings, Roadmasters and Maintenance of Way Association.
- Continuation of annual meetings, American Railway Bridge & Building Association.
- Adjourn at noon — visit exhibits in afternoon.

ALL DAY —
- Continuation of annual meeting, National Association of Shippers Advisory Boards—Morrison Hotel.

NOON —
- Men's luncheon, Coordinated Associations, Banquet Room.

Wednesday, October 16

MORNING —
- General session, annual meeting, National Association of Shippers Advisory Boards—at the Morrison Hotel.
- Continuation of meetings:
  Roadmasters and Maintenance of Way Association
  American Railway Bridge & Building Association
  Coordinated Associations

AAR Presses for Arbitration Law

Compulsory arbitration, AAR President Loomis has told a Congressional committee, would strengthen—not weaken—the collective bargaining process, and protect the public interest.

Daniel P. Loomis, president of the AAR, last week advised Congress again of the railroad industry's position in favor of compulsory arbitration to settle the industry's major labor disputes. Mr. Loomis made his statement before the House Committee on Merchant Marine and Fisheries, where he supported a bill, H. R. 1897, for settling maritime-industry disputes by compulsory arbitration.

He made his presentation for two principal reasons: (1) because maritime strikes inflict "unjustifiable harm" on the public and other forms of transportation, including railroads, and (2) because the bill "exemplifies a principle that we are convinced should apply to the ultimate disposition of major disputes in our own industry." Mr. Loomis added that the railroads "would be glad to see this principle recognized and applied by Congress also to other branches of transportation."

● **Maritime strike losses.** As to the impact of the longshoremen's strike which led to introduction of the bill, Mr. Loomis had a detailed statement pointing up the loss of export and import traffic, the tie-ups of freight cars at the ports, and the "dislocations along the entire length of the railroad system." Summing up on this point, the AAR president said:

"The strike may be said to have had a possible if not a probable effect on a volume of rail traffic, the revenues from which would have amounted to approximately $20 million on export traffic only. Obviously, import traffic must also have been adversely affected.

"The strike is still producing adverse effects more than two months after it ended. The piers are filled to capacity and overtaxed. The handling of accumulated cargoes has been greatly delayed, and in consequence export freight cars have been held in yard areas for abnormal periods. The detention of these cars contributes to car shortages in other parts of the country, and represents a serious waste of transportation equipment."

● **Public interest.** Supporting his recommendation for compulsory arbitration for railroad disputes, and those in other branches of the transportation industry, Mr. Loomis said that strikes in the industry "are contrary to the public interest" and some alternate and definitive method of settling disputes that lead to them "must be found." The AAR president noted the opposition to compulsory arbitration among some business executives and labor leaders. He had this comment:

"However valid those views may be with respect to industry in general, they do not apply to regulated public utilities such as those in the transportation industry. It is sometimes said that if the government takes a hand in the settlement of labor disputes, this would lead to its taking a hand in the settlement of prices. However, pricing in the transportation industry and particularly in the railroads, is already subject to strict government regulation. This regulation bears directly on the amount of railroad revenues. It would not be unreasonable, in the light of this fact, for the government to assert some power over a major element of railroad costs, such as those that result from the unlimited power of employees to strike. We think that a special form of handling of labor disputes is justified in the case of regulated public utilities, such as the different forms of transportation."

● **No bar to bargaining.** Mr. Loomis went on to emphasize that the railroad industry "strongly favors free collective bargaining," and it does not think that such bargaining will be discouraged or nullified if the bargaining parties know that, if they do not reach agreement, "there is a process at the end of the line that will settle the dispute for them." This knowledge "should stimulate and encourage more energetic bargaining, because the parties will normally prefer an agreement of their own making to one made for them by an outside agency," he added.

The railroad industry's experience with emergency-board recommendations prompted Mr. Loomis to dispute the "theory" that settlement terms recommended by investigative boards will solve the problem, because "public opinion will strongly support these recommendations and compel their acceptance by the parties." The legislative history of the Railway Labor Act shows that Congress relied on this theory when it enacted the emergency-board provisions, the AAR president said.

● **Tightening the RLA.** "The historical experience of the railroads under the Act shows that it has not worked out as originally contemplated," Mr. Loomis added. He went on to explain that emergency-board procedures have become "a one-sided compulsory arbitration—compulsory on the railroad side." On the union side, the recommendations of Presidential boards, he said, "have been used as a floor, or springboard for further union demands."

In addition to his proposal that recommendations of such boards be made "final and binding" on the parties, Mr. Loomis suggested other related changes in the Railway Labor Act. He would eliminate the President's discretionary authority to appoint an emergency board, and give either party to a dispute the right to request such a board after other procedures of the Act had been exhausted. He would also provide for "limited judicial review" of emergency-board decisions. Such review would be "on specified statutory grounds," and "should not extend to the substantive merits of the final award."

Tierney Takes ICC Oath

Newest member of the Interstate Commerce Commission is Paul J. Tierney (right), shown taking the oath of office administered by Judge E. Barrett Prettyman, U.S. Court of Appeals (left), while ICC Secretary Harold D. McCoy looks on.

D. O. Burke
Milwaukee

W. E. Swingle
Milwaukee

F. G. Fisher
Reading

E. A. Bohmeyer
Wabash

R. W. Benbrake
Wabash

Paul N. Strobell
Alco

PEOPLE IN THE NEWS

AKRON, CANTON & YOUNGSTOWN.—A. W. Hochberg, general superintendent, Akron, Ohio, promoted to acting vice president—operations, succeeding **F. F. Lentz,** who has requested that he be relieved of the duties of that office, for reasons of health.

BURLINGTON.—Kenneth L. Schramm, commercial agent, St. Louis, appointed manager of merchandise traffic, Chicago, replacing **Robert J. Fiala,** named vice president, traffic, Burlington Truck Lines.

BURLINGTON TRUCK LINES.—Robert J. Fiala, manager of merchandise traffic, Burlington, appointed vice president, traffic, BTL, succeeding **John J. Lynch,** who retired April 1.

CANADIAN NATIONAL.—C. E. Sanschagrin, operations manager, Capreol, appointed special assistant, reporting to the manager, Northern Ontario area, Capreol. **R. A. Walker,** acting operations manager, Northern Ontario area, Capreol, appointed operations manager there.

Fabian Kennedy, superintendent, Moncton freight classification yard, appointed employee relations officer, Great Lakes region. **S. A. Killeen,** office manager, Montreal, appointed employee relations officer, succeeding **D. O. McGrath,** promoted.

Delbert M. Bressette, engineer in the research and development branch, Montreal, appointed superintendent of equipment, Toronto Area, succeeding **Richard M. Veenis,** promoted to general superintendent of equipment (RA, March 11, p. 46).

CHESAPEAKE & OHIO.—A. Sidney Morton, coal traffic sales engineer, Boston, Mass., named coal traffic manager—engineering, Richmond, Va., succeeding **George Ritchie,** retired. **Carl S. Dennis,** general fuel service engineer, Huntington, W. Va., succeeds Mr. Morton. **John F. Walser,** fuel service engineer, Greensboro, N.C., named general fuel service engineer there. **E. J. Luebben** named assistant general coal traffic agent, Richmond, succeeding **W. W. Lowry,** retired. **B. T. Childress, Jr.,** appointed coal traffic agent, Beckley, W. Va.

C. F. Shelton appointed director of piggyback equipment control and **D. W. Smirl** named operations manager—piggyback terminals, both at Huntington. **E. F. Shepard** named assistant to superintendent, Huntington division, succeeding the late **B. S. Wilkes. W. G. Sechler,** assistant to superintendent transportation, Detroit, named assistant superintendent transportation there. **H. L. Conti,** assistant to general superintendent computer application, Huntington, succeeds Mr. Sechler. **A. W. Gillette,** trainmaster, Ludington, Mich., transferred to Grand Rapids, succeeding **C. A. Persinger,** promoted to assistant superintendent there (RA, March 11, p. 46). **F. W. Miles,** general agent, Norfolk, appointed assistant superintendent—merchandise piers, Newport News, Va., succeeding **W. H. Hussey,** retired. **A. W. Pitchford** appointed general agent, Charlottesville, Va., succeeding **J. A. Livesay,** transferred to Richmond, succeeding **A. S. Tatum,** who replaces Mr. Miles at Norfolk. **W. F. Tabor** appointed supervisor station service, Peru, Ind., succeeding **J. P. Vincent,** named general agent, Chicago, to replace the late **W. J. Slania. T. J. Sheehan, Jr.** appointed general foreman—coal piers, Newport News.

Abolished positions of assistant manager piggyback operations—system, formerly held by Mr. Smirl, and acting assistant to superintendent, Huntington, formerly held by Mr. Shepard.

J. B. Small appointed assistant supervisor signals, Columbus, Ohio, succeeding **V. C. Wales.** retired. **P. T. Brown** appointed assistant supervisor signals, Huntington, succeeding **W. M. Dunn,** retired.

CHICAGO & NORTH WESTERN.—R. J. Ingham appointed district storekeeper, Proviso, Ill., to succeed **W. A. Vallely,** who retired March 31.

J. S. Sorce named district general car foreman, Chicago, succeeding **J. D. O'Neill,** advanced to assistant superintendent car department there.

CHICAGO SOUTH SHORE & SOUTH BEND.—Forrest R. Edgington, commercial agent, Minneapolis, named general agent, Kansas City.

DEFENSE TRAFFIC MANAGEMENT SERVICE.—Col. Richard M. Ludlow, director of policy and plans, DTMS, has retired.

DENVER & RIO GRANDE WESTERN.—M. M. Tapper appointed district freight and passenger agent, Pueblo, Colo., succeeding **J. J. Martin,** transferred to Denver.

D. J. Izett, livestock agent, Denver, retired March 31.

DETRIOT, TOLEDO & IRONTON.—Robert S. Klan

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the great restaurants in America
on the fingers of one hand."

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and **William C. Rank** appointed district sales representatives, Chicago.

ERIE-LACKAWANNA.—William B. Wagner, agent and yardmaster, Mahwah, N.J., promoted to trainmaster, New York division.

MILWAUKEE.—D. O. Burke appointed assistant general manager, Chicago, replacing **W. E. Swingle,** named assistant to vice president-operations there. Mr. Burke, formerly superintendent, Indiana Harbor Belt, Gibson, Ind., will have jurisdiction of all territory east of Miles City, Mont. **J. H. Schnaitman,** assistant to operating vice president, retired March 31.

MISSOURI PACIFIC.—Willard B. Gay, sales representative, San Francisco, named district sales manager, Eugene, Ore., replacing **Robert A. Sheldon, Jr.,** transferred to Portland, Ore.

NORFOLK & WESTERN.—Kenneth O. Baker appointed assistant foreign freight agent, Norfolk, Va.

NORTHERN PACIFIC.—W. A. Marshall appointed purchasing agent, St. Paul, Minn., succeeding the late **G. M. Carr.** Abolished position of assistant purchasing agent, formerly held by Mr. Marshall.

L. S. Kiser, special sales representative for TOFC (piggyback) service in St. Paul, appointed assistant to general freight agent—rates, Seattle, Wash. **W. H. Egan,** city freight agent, Minneapolis commercial office, succeeds Mr. Kiser.

PENNSYLVANIA.—A. M. Schofield, assistant regional manager, Northwestern region, Chicago, promoted to regional manager, Buckeye region, Cincinnati, Ohio, succeeding **H. H. Vaughn,** transferred to Philadelphia (RA, April 8, p. 70). **J. C. Sperry,** superintendent transportation, Chesapeake region, Baltimore, succeeds Mr. Schofield at Chicago.

A. R. Marsh, superintendent of equipment, Northwestern region, Chicago, transferred to Philadelphia, succeeding **R. C. Johnston** (RA, April 8, p. 70). **C. A. Korn,** superintendent equipment, Southwestern region, Indianapolis, transferred to Chicago.

W. T. Hammond, regional engineer, Lake region, Cleveland, appointed engineer, maintenance of way, Columbus, Ohio. **A. S. Barr,** regional engineer, Philadelphia, named engineer maintenance of way, Chicago. **C. R. Bergman,** regional engineer, Chesapeake region, Baltimore, named area engineer there. **G. A. Williams,** regional engineer, Pittsburgh, appointed area engineer there succeeding **K. J. Silvey,** transferred to Columbus, Ohio.

John H. Burdakin, system industrial engineer—transportation, Philadelphia, appointed superintendent of transportation, Chesapeake region, Baltimore, succeeding **John C. Sperry,** promoted to assistant regional manager, Northwestern region, Chicago. **William C. Wieters,** trainmaster, Altoona, Pa., appointed assistant superintendent of transportation, Conway Yard, Conway, Pa., succeeding **E. Robert Adams,** named superintendent of transportation at Buffalo (RA, April 8, p. 70).

READING.—W. A. W. Fister, superintendent motive power and rolling equipment, Reading, Pa., retired March 31 after more than 41 years of railroad service. **F. G. Fisher,** assistant superintendent motive power and rolling equipment and mechanical engineer, appointed chief mechanical officer. Abolished positions of superintendent and assistant superintendent motive power and rolling equipment.

REA EXPRESS.—John A. Davies, supervisor, Automotive Division, Northeast region, REA Express, appointed special representative to coordinate service and maintenance of REA Leasing Corp.'s nationwide pool of piggyback trailers and containers.

SANTA FE.—D. M. Miller, master mechanic, Chicago, named superintendent of shops, Argentine, Kans. **V. R. Carlson,** master mechanic, La Junta, Colo., appointed to the newly created position of superintendent of shops, Chicago, with jurisdiction over the Chicago Terminal and Illinois divisions. **D. H. Bristow** named assistant superintendent of shops-Locomotive Department, and **D. L. Vincent** appointed assistant superintendent of shops-Car Department, both at Argentine.

SEABOARD.—Ralph J. Falls, office assistant to the chief engineer, Richmond, Va., retired March 31 after 50 years' service.

TOLEDO, PEORIA & WESTERN.—R. M. Esslinger, general manager, elected vice president in charge of operations.

TRAFFIC EXECUTIVE ASSOCIATION—EASTERN RAILROADS.—W. C. Schaller, assistant chairman, General Freight Traffic Committee, retired March 31, and that position abolished. **Gordon W. Lindsay** appointed a Research Group member, General Freight Department. **Aaron Cohen** appointed chairman, North Atlantic Ports Group.

TRANS-CONTINENTAL FREIGHT BUREAU.—W. J. Prueter, tariff publishing officer, named chairman, succeeding **M. F. Edbrooke,** retired.

WABASH.—E. A. Bohmeyer, assistant to vice president-traffic, St. Louis, appointed central traffic manager there, succeeding **C. W. Carter,** resigned. Mr. Bohmeyer's successor is **R. W. Bonbrake,** sales manager, Toledo, Ohio, who in turn is replaced by **L. J. Paternoster,** district sales manager, Philadelphia. **A. F. LeGros,** district sales manager, Cleveland, replaces Mr. Paternoster, and in turn is succeeded by **R. T. Bevans. L. E. Caldwell,** assistant district sales manager, Cleveland, named to the newly created position of district sales manager, Fort Wayne, Ind. **L. H. Cass** replaces Mr. Caldwell. **H. S. Jones** appointed district sales manager, Peoria, Ill., succeeding **B. H. Thomas,** transferred to Decatur, Ill. **K. A. Schuster** and **C. J. Schreier** named district sales managers, Buffalo, N.Y. and Jacksonville, Fla.

WESTERN MARYLAND.—Robert B. Wooters, assistant vice president—coal development, Baltimore, named assistant vice president—sales. **Albert R. Salvato,** coal traffic representative, Cumberland, Md., named manager of mineral and timber lands, Thomas, W. Va.

Supply Trade

Paul N. Strobell has been elected a vice president of **Alco Products,** Schenectady, N.Y., and will continue to manage the locomotive and engine products division.

S. J. Colcombe, assistant manager—transportation sales, **Union Switch & Signal Division of Westinghouse Air Brake Co.,** Pittsburgh, has been appointed manager—transportation marketing.

James S. Hubbard, district sales manager, **Wyandotte Chemicals Corp., J. B. Ford Division,** Cincinnati, Ohio, transferred to the Southeastern district, Atlanta, Ga., succeeding **T. N. Jones,** retired. **Richard H. Andrew** succeeds Mr. Hubbard at Cincinnati.

The Kinnear Manufacturing Co. of Columbus, Ohio, reports that their subsidiary, **Kinnear Manufacturing Co. of Canada, Ltd.,** has purchased assets of **Preston Steel Products,** 3683 Dundas Street, West, Preston, Ont. Preston management and personnel will be retained at the present address, but the company will be known as Kinnear Manufacturing Co. of Canada, Ltd.

John Reine, executive vice president, **Graybar Electric Co.,** New York, has been elected president, effective June 1, succeeding **Willard E. Henges,** who will retire May 31, after 50 years of service.

J. W. Van Gorkom has been elected president and chief executive officer of **Union Tank Car Co.** Mr. Van Gorkom was formerly executive vice president and recently had also been serving as chief executive officer.

Track Specialties Co., manufacturers of Trasco track devices for almost 50 years, will move its executive offices to Westport, Conn. (P.O. Box 729), from 1775 Broadway, New York, effective May 1.

Haveg Corp., Wilmington, Del., a subsidiary of Haveg Industries, Inc., has established a new Container Division for the manufacture of large capacity blow-molded industries containers.

OBITUARY

Edred B. Hall, Sr., 92, retired chief mechanical officer, **Chicago & North Western,** died March 30 at Pasadena, Calif.

Joseph H. Schuermann, 47, deputy director of freight traffic, **Defense Traffic Management Service,** died April 4 at his home in Arlington, Va.

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YOU OUGHT TO KNOW

Pipeline transportation of solid slugs of coal or iron ore and plastic capsules containing wheat or chemicals is envisioned by a Canadian engineer, H. S. Ellis of the Research Council of Alberta. Mr. Ellis, addressing the American Chemical Society at Los Angeles, said the council's research program is aimed at developing new methods for moving Alberta's raw materials to distant markets. Laboratory and theoretical studies, he said, are showing promise for practical application, and industry is being invited to participate in further development work.

An order backlog of "well over 3,000 cars" is reported by Pullman-Standard, compared with slightly more than 2,000 a year ago. Noting that the company's steel buying has increased by 15% to 20% this year, a company spokesman adds: "It's for orders, not inventory."

Failure of a truck driver to stop before entering a grade crossing (as required by law) has been blamed by the ICC for an accident in which three Cotton Belt trainmen were killed and the truck driver injured at Chandler, Tex., Nov. 23, 1962. A Cotton Belt train struck the rear end of the semi-trailer and ignited its 6,000-gallon cargo of crude oil. The first of two diesel-electric units powering the 76-car train was destroyed in the resulting fire, and the engineer, fireman and front-end brakeman were killed.

Japan's new Tokaido Line is being inspected by foreign railroaders during a "study week" (April 11-18) sponsored by the Japanese government and the United Nations Economic Commission for Asia and the Far East. The 315-mile line, scheduled for completion in 1964, will be able to handle 90 trains daily at an average speed of 105 mph. ICC Chairman Laurence K. Walrath heads the U.S. delegation.

Minimum-rate deregulation has picked up important support in the West. The Western Growers Association, representing the fresh vegetable and melon industry of California and Arizona, says it is in "full support" of President Kennedy's transportation bills, and in particular the deregulation proposal, which "would encourage competition and place the railroads and truck lines on a more equitable basis." "The railroads," says WGA, "have been at a distinct disadvantage for many years, especially in their ability to meet quickly the changing rates and economies which the exempt truckers have been able to offer for transporting food products to the nation's markets."

Policies which tie rates to fully-distributed costs are "contrary to the interests of both the railroads and the public," contends Dr. Merrill J. Roberts, professor of transportation at the University of Pittsburgh. "Where rates are held too high on this account profits are needlessly sacrificed, shippers pay excessive charges, utilization of the rail system is artificially restricted, and uneconomic investment is encouraged in other types of transportation," Dr. Roberts told an April 8 meeting of the Community Relations Committee of the Pittsburgh Railroads.

Five electric locomotives, being delivered to the Iron Ore Company of Canada this month, will be substituted for the four GP-9 diesel-electrics currently powering automated ore trains over a six-mile route at Labrador City, Newfoundland (RA, Sept. 3, 1962, p. 12). The 1,200-hp, 125-ton electrics, under construction by General Motors Diesel Ltd., will be fitted with automatic controls. Because the IOCC railroad is being extended directly into an underground mine, conversion of the entire line to electric operation will simplify mine ventilation problems.

High-horsepower diesel-electrics, being upgraded from older, lower-powered units, are going into service on the Canadian Pacific. General Motors Diesel Ltd. is producing Canada's first two GP-30's by rebuilding two early GP units which it delivered to the CP several years ago. Montreal Locomotive Works is converting a 1,600-hp unit into a 2,400-hp DL-640-A to produce another Dominion "first." All units are being assigned to high-speed freight trains.

"Rapid Transit Concepts" is the title of a 24-page booklet just issued by Westinghouse Air Brake Co.'s Mass Transit Center, Pittsburgh. The publication discusses "practical realities" of implementing transit proposals now in the planning stage.

Trainload rates on all-rail utility coal to Eastern Trunk Line destinations are now being offered by the major coal-carrying roads—the reduction under standard rates being $1.50 per ton for 8,000-ton trainloads and 85¢ for 4,000-ton shipments. (This rate reduction by one railroad—PRR—was reported on this page last week.) Some discounts on trainload quantities to New England destinations are also understood to be under consideration.

Indicted for alleged conspiracy to fix prices of wrought steel wheels are five companies, two of which are also among four companies charged with conspiracy to fix prices of rolled steel pipe flanges and rings. The indictments, returned by a federal grand jury in New York, were announced April 2 in Washington by Attorney General Robert Kennedy. Defendants in the wheel case are United States Steel Corp., Bethlehem Steel Co., Armco Steel Co., Edgewater Steel Co., and Baldwin-Lima-Hamilton Corp. They are the only producers of wrought steel wheels, which is a $60 million annual business for them, the Department of Justice announcement said. The wheels are used on railroad cars and locomotives, and on cranes and other industrial equipment. Defendants in the pipe flanges and rings case are Edgewater, B-L-H, Taylor Forge & Pipe Works, and Alco Products, Inc.

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Lopsided Promotion

When government monkeys with scientific research, its activity is lopsided, just as has been its invasion of transportation.

A St. Louis botanist has registered a complaint that railroaders will find it easy to appreciate.

Dr. Barry Commoner of Washington University (as reported in the New York Times) noted that almost a billion dollars of federal money was spent last year for research in space navigation—while the National Science Foundation was allotted just about 10% of that amount for research over the entire range of science. Many leading educational institutions are getting more than half their total revenues from the federal government.

"Education," Dr. Commoner observed, "is supported by science, science by space, and space by the man in the moon."

Elsewhere it is reported that the federal government will probably have to spend $30 billion to land a manned space-capsule on the moon—plus an additional $10 billion for scientific exploration connected with such an exploit.

This one narrow wedge of scientific research (important though it may be) is getting billions in money and millions of man-hours of high-grade brains—leaving only chicken feed (by comparison) for advancement in the thousands of other areas of scientific research, where progress is as important and desirable as is space exploration.

Railroad people will understand what Dr. Commoner is talking about—because government practices the same kind of distortion in expenditures on transportation plant that it is now introducing into scientific research. Federal, state and local governments will pay out about $15 billion this year for construction and maintenance of highways, waterways and air transport facilities. Meantime, the self-supporting railroads will be fortunate if they can find $1-¼ billion to spend on maintenance and renewal of their comparable fixed plant.

When economic and technological and scientific development is left to private initiative, such artificial distortion in expenditure—favoring some areas and neglecting others—does not occur. Left to private initiative, improved highways or waterways or air transport facilities would have exactly the same opportunity to attract investment capital that railway improvements would have—no more and no less. Similarly, in the area of scientific research, some private donors to educational institutions would, quite likely, be just as interested in the advancement of economic knowledge (or in archeology, or medicine, or literature, or what have you) as others would be in developing faster airplanes or moon capsules.

But when government gets into the act, out goes all even-handed objectivity. The projects that are dramatic and spectacular get all the emphasis, while other equally deserving areas of knowledge have to content themselves with the left-overs.

In the debate in Congress over the federal mass transit bill, many if not most of the "conservative" legislators registered themselves in opposition. They could not be fairly criticized for this—if they had shown equal opposition to federal appropriation for highways, waterways and air transport facilities. But many "conservatives" have acquiesced in governmental distortion of transportation by subsidies to highway and air transport facilities around big cities. They are apparently unwilling to correct the imbalance, either by eliminating subsidies altogether —or by granting similar favors to mass transit facilities.

Imbalance in Transportation

Some well-known "liberals" have been far more consistent in their opposition to lopsided promotion in transportation than have many who wear the "conservative" label. For example, Lewis Mumford, the authority on urban planning, calls attention to "overdeveloped throughway systems" and observes that our "overbuilt and overburdened highways" are carrying "passengers and freight that can be more economically carried by rail and water."

Mr. Mumford's criticism of government's lopsidedness in its promotion of transportation is an exact parallel to Dr. Commoner's concern over similar governmental distortion in the realm of scientific research. When government gets into areas where it has only limited experience, it usually introduces a maximum of financial brawn and a much smaller component of brains. Either the brawn content should be trimmed down or the ingredient of wisdom augmented, or we are in for trouble.

The present goal seems to be unlimited facilities for transportation to the moon—but relatively minor concern for such humdrum terrestrial jobs as economical freight transportation, or getting people to and from their work at minimum expense and maximum convenience. Thus the railroads find themselves in the distinguished company of nonlunar scientific research—both being treated as stepchildren so far as governmental consideration is concerned.

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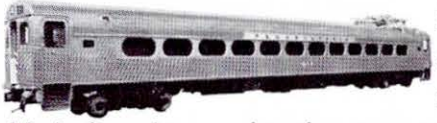

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